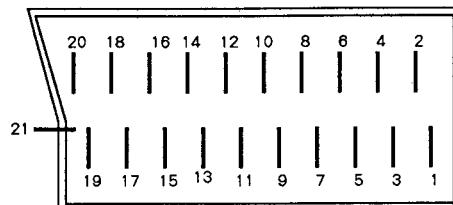


SONY

KVM14TU

MODEL

SERVICE MANUAL

21-pin Euro Connector Configuration

PIN	SIGNAL	SPECIFICATION
1	Audio output	0.5Vrms/1kilohm or less
2	Audio input	0.5Vrms/10kilohms or more
3	Audio output	0.5Vrms/1kilohm or less
4	Earth (audio)	
5	Earth (B-input)	
6	Audio input	0.5Vrms/10kilohms or more
7	B-input	0.7Vp-p/75ohms
8	Function switching	9.5V to 12V
9	Earth (G-input)	
10		
11	G-input	0.7Vp-p/75ohms
12		
13	Earth (R-input)	
14	Earth (blanking)	
15	R-input	0.7Vp-p/75ohms
16	Fast blanking	1V to 3V/75ohms
17	Earth (video)	
18	Earth (fast blanking)	
19	Video output	1Vp-p/75ohms
20	Video input	1Vp-p/75ohms
21	Screening plug	

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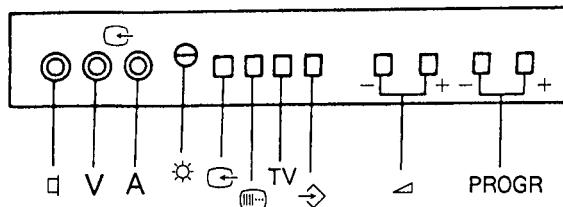
Section	Title	Page	Section	Title	Page
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1-2. On The Remote Commander	4		5-2. Schematic Diagrams	16	
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SECTION 1

GENERAL

Note) The layout, etc., will be slightly different from the operating instructions packed with the units.

1-1. FUNCTION OF CONTROLS



On the set

① On-screen display

Indicates program numbers and input mode ;

Press the button to make the display appear on the screen, and again to make it disappear. See also "On the Remote Commander" below.

Bar display

Indicates the level of the user controls when they are adjusted ; volume, contrast or color.

② power switch

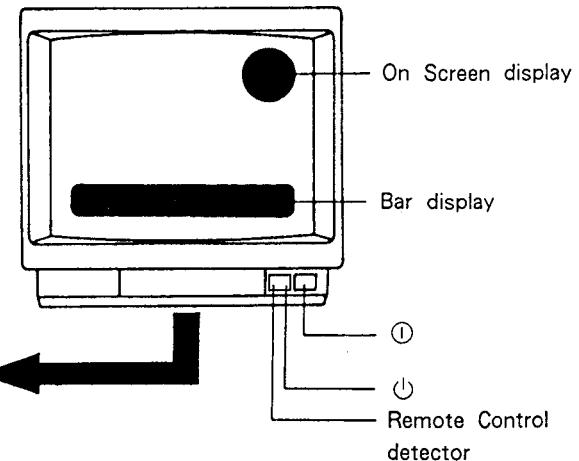
To cut off the main electricity supply, press this switch. Ensure correct operation by pressing the switch fully.

Remote control detector

Point the Remote Commander towards this detector.

③ standby indicator

Lights up brightly when the set is in standby mode.



Inside the panel

④ earphone jack (minijack mono)

⑤ preset button

⑥ analogue select buttons

Press repeatedly until the on-screen display of the required adjustment appears (volume, contrast or color). Adjust by using the + or - buttons.

⑦ input button

Press this button to view the input picture coming in through the 21-pin connector or the connectors on the front panel. appears on the screen. Press again or PROGR + / - to return to the TV mode.

Extra equipment can be connected to the TV using both the 21-pin connector and the input connectors, but only one piece of equipment besides the TV should be turned on at one time.

⑧ brightness control

Turn clockwise for more brightness or anticlockwise for less.

⑨ Volume adjustment buttons +/ -

Use these buttons adjust the volume to the desired level.

PROGR +/ - buttons

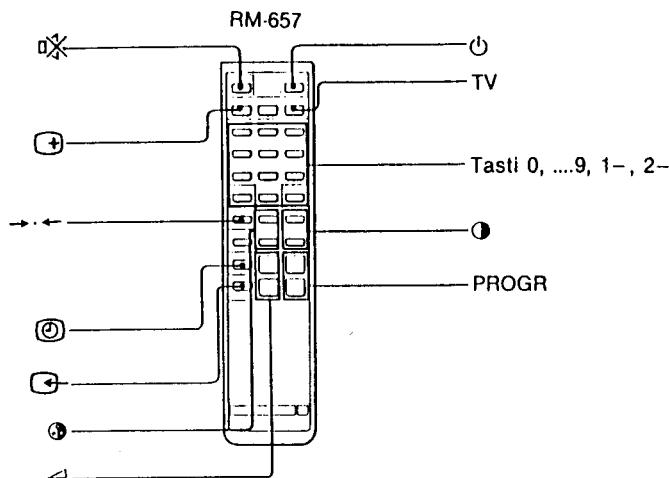
Use to scan the available channels. To turn on the TV from standby mode without the remote commander, press any of these buttons.

⑩ Video/Audio input connectors (phono)

Connect to a VTR, micro-computer, etc.

- V (Yellow) video input
- A (Black) audio input (mono)

1-2. ON THE REMOTE COMMANDER



To operate the Commander, point it toward the remote control detector.

mute button

Use to mute the sound. Press $\triangle +$ or $\triangle -$ to restore the sound.

0, ..., 9, 1-, 2-buttons

To select:

program 15, press 1- and 5,
program 25, press 2- and 5.

$\triangle - \triangle +$ Reset button

Press to return color and contrast to factory-set levels.

standby button

Press to select standby mode. Use this facility to turn off the set for short periods of time.

To return to TV mode, press TV or the program number on the Remote Commander; there will be a slight delay before the picture is restored. If the main power is turned off when in standby mode, the indicator will take 2 to 6 seconds to go off.

On-screen display button

Indicate the program number and the input mode. Press this button to make the display appear on the screen, and press the button again to make it disappear.

TV button

Press to change to the TV mode from standby, \odot input modes.

PROGR + / - buttons

Use to scan the available channels.

$\triangle + / \triangle -$ volume buttons

color buttons

contrast buttons

input button

Press to view the input picture from the \odot connector or \odot connectors. " \odot " appears on the screen. Press \odot PROGR + / - or a program number key to return to the TV mode.

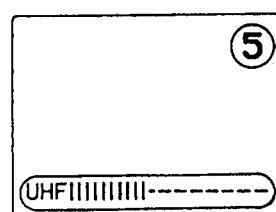
1-3. TO PRESET CHANNELS

Use the buttons inside the panel. To open the panel, push and pull the center.

Manual Programming

To Tune in a Channel in Any Desired Program Position

- 1 Press \triangle (preset) to select the presetting mode.
- 2 Select the desired program position by using the PROGR + or - button.
- 3 Press $\triangle +$ or $\triangle -$ repeatedly until the TV program of the desired channel appears.
- 4 Repeat steps 2 and 3 for all desired channels.
- 5 Press \triangle again to return to the TV mode.



Indicates the approximate location in the band of the channel being tuned in. The number of upright segments increase for a higher-frequency channel and decrease for a lower-frequency channel.

1-4. VIEWING TELETEXT

To view the teletext service, use the Remote Commander. RM-657 has teletext buttons indicated in green teletext operation are indicated in green.

Operation

- 1 Select the TV channel for the desired teletext service.
- 2 Press $\text{[} \text{]}/\text{[} \text{]}$ (TEXT/MIX) to display the teletext service.
Once $\text{[} \text{]}/\text{[} \text{]}$ has been pressed, the TV channel cannot be changed.
- 3 Key in the three digits for the desired page using the number buttons. If an error is made, complete the three digit sequence by keying in any digit. Then re-enter the correct page number. The requested teletext page is displayed.

To return to the TV mode, press TV on the Remote Commander.

The teletext service can be displayed directly from the standby mode, by pressing $\text{[} \text{]}/\text{[} \text{]}$.

To receive the teletext service of a different TV channel.

- 1 Press TV to return to the TV mode.
- 2 Select the desired TV channel.
- 3 Press $\text{[} \text{]}/\text{[} \text{]}$.

To display the index page.

Press $\text{[} \text{]}$ (INDEX). If the necessary signal is not being broadcast, page 100 is displayed.

To access the next or preceding page

Press $\text{[} \text{] } \text{[} \text{]}$ (PAGE+) or $\text{[} \text{] } \text{[} \text{]}$ (PAGE-).

These buttons are indicated in white on the Commander.

To superimpose the teletext display on the TV picture.

Press $\text{[} \text{]}/\text{[} \text{]}$ twice from TV mode.

Press $\text{[} \text{]}/\text{[} \text{]}$ again to return to the TEXT display.

To suppress the teletext display so that the TV picture is displayed.

Press $\text{[} \text{]}$ (TEXT CL). This button can be operated from both the TEXT and MIX displays.

To prevent a teletext page (subpage) from being updated/changed.

Press $\text{[} \text{]} \text{ HOLD}$. The HOLD symbol “ $\text{[} \text{]}$ ” appears at the top left of the screen.

To resume normal teletext reception, press $\text{[} \text{]}/\text{[} \text{]}$.

To enlarge the teletext display.

Press $\text{[} \text{]}$. Press once to enlarge the upper half of the display; press again to enlarge the lower half of the display; press again to return to the normal display.

To reveal concealed information such as the answers to a quiz

Press $\text{[} \text{]}$ (REVEAL)

Press again to conceal the answers.

To adjust the contrast of the teletext display.

Press $\text{[} \text{]} +$ or $\text{[} \text{]} -$ button.

To watch the TV program while waiting for a requested page to be displayed.

1 Request the new page.

2 Press $\text{[} \text{]}$ to watch the TV program. The requested page number appears at the top left of the screen.

When the requested page has been found, the page number is displayed on the top left hand corner of the screen.

P101

(TV picture)

To view this page, press $\text{[} \text{]}/\text{[} \text{]}$.

To have a requested page displayed at a pre-determined time.

1 Request a time coded page (e. g. alarm page).

2 Press $\text{[} \text{]}$ (TP ON).

“T***” will appear at the bottom of the screen.

T***

3 Enter your request time with the number buttons, using four digits. For example, 07 : 30.

T0730

To watch the TV program until the requested time, press $\text{[} \text{]}$. At the requested time, the page number will be displayed at the top of the screen.

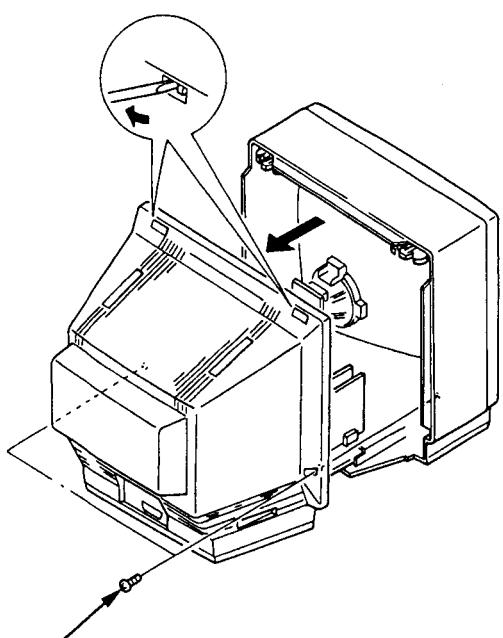
To view this page, press $\text{[} \text{]}/\text{[} \text{]}$.

To cancel the request, first ensure that the teletext page is displayed, then press $\text{[} \text{]}$ (TP OFF).

SECTION 2

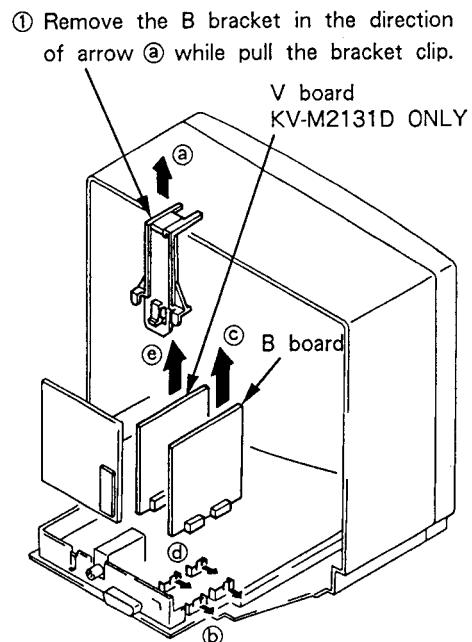
DISASSEMBLY

2-1. REAR COVER REMOVAL



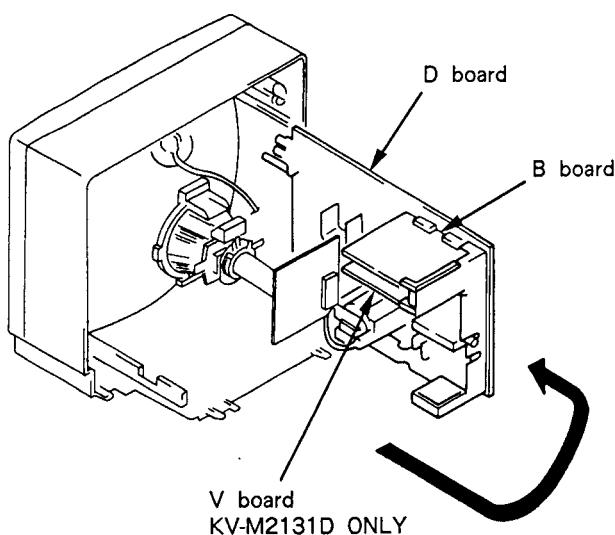
- ① Remove the two screws.
- ② On the top of the rear cover, use a screwdriver to push the tab (circled in the figure) in the direction of the arrow to release the cover holder.

2-2. B AND V BOARDS REMOVAL

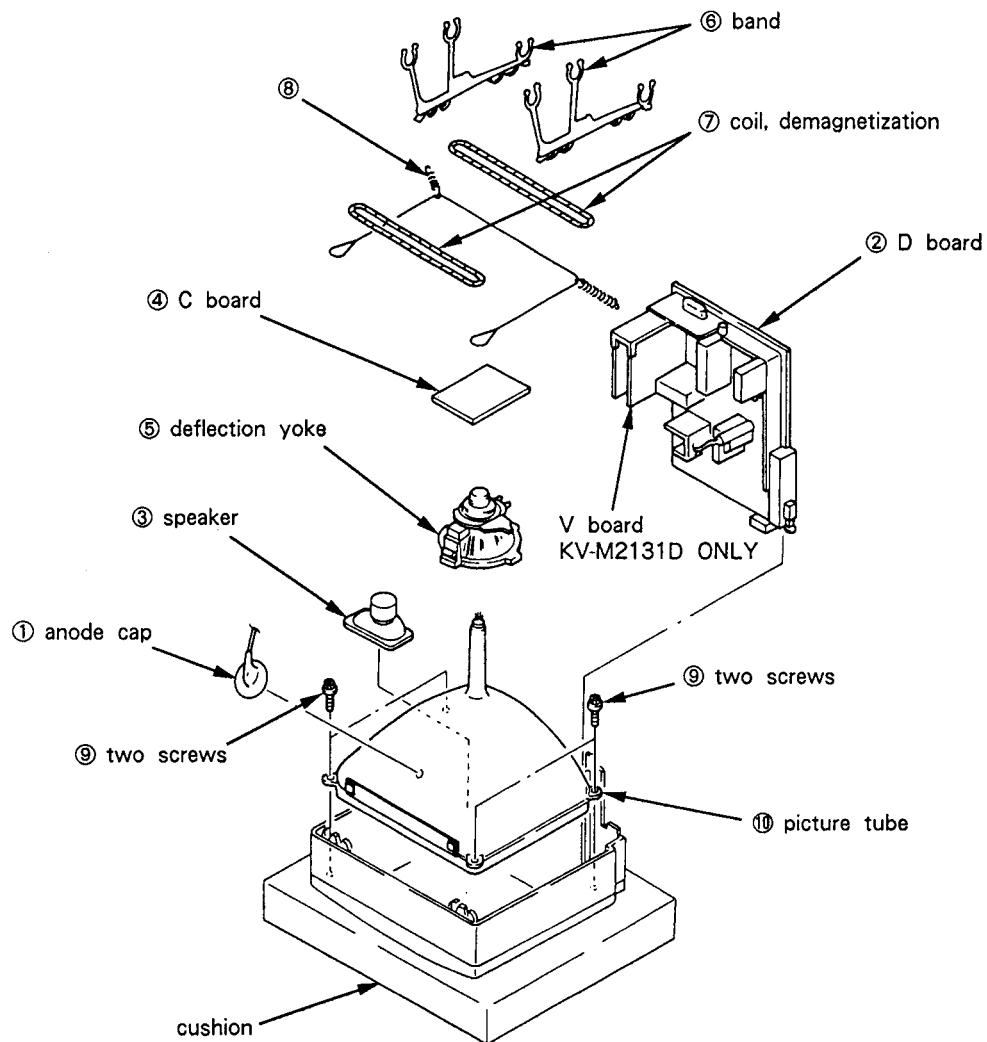


- ① Remove the B bracket in the direction of arrow ② while pull the bracket clip.
- ② Pull the two clips in the direction of arrow ④. Remove the B board in the direction of arrow ③.
- ③ Pull the two clips in the direction of arrow ④. Remove the V board in the direction of arrow ⑤. (KV-M2131D only)

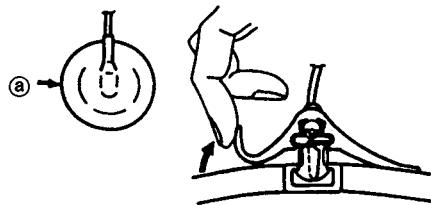
2-3. SERVICE POSITION



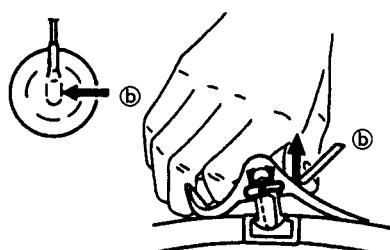
2-4. PICTURE TUBE REMOVAL



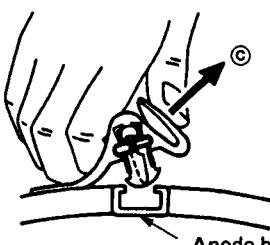
• REMOVAL OF ANODE-CAP • REMOVING PROCEDURES



① Turn up one side of the rubber cap in the direction indicated by the arrow (a).



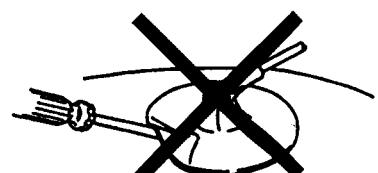
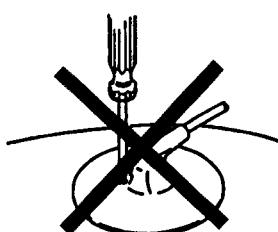
② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow (b).



③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow (c).

• HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp shaped material !
- ② Don't press the rubber hardly not to hurt inside of anode-caps !
A metal fitting called as shatter-hook terminal is built in the rubber.
- ③ Don't turn the foot of rubber over hardly !
The shatter-hook terminal will stick out or hurt the rubber.



SECTION 3

SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

The control and switch below should be set as follows unless otherwise noted :

● CONTRAST control 80% (or Normal by Commander)
 ● BRIGHTNESS control 50%

Perform the adjustments in order as follows :

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

Note : Test Equipment Required.

1. Color Bar/Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital multimeter
5. Oscilloscope

Preparation

- Set the side of the unit with the PICTURE TUBE so that it faces east or west in order to reduce the influence of external magnetic force.
- Turn the power switch for the unit ON and erase the magnetic force using a degausser.

3-1. BEAM LANDING

1. Input a raster signal with the pattern generator.
 CONTRAST } normal
 BRIGHTNESS }
2. Turn the raster signal of the pattern generator to red.
3. Move the deflection yoke backward, and adjust with the purity control so that red is in the center and blue and green are at the sides, evenly. (Fig. 3-1 – 3-3)
4. Move the deflection yoke forward, and adjust so that the entire screen becomes red. (Fig. 3-1)
5. Switch over the raster signal to blue and green and confirm the condition.
6. When the position of the deflection yoke is determined, tighten it with a deflection yoke mounting screw.
7. When landing at the corners is not right, adjust by using the magnet. (Fig. 3-4)

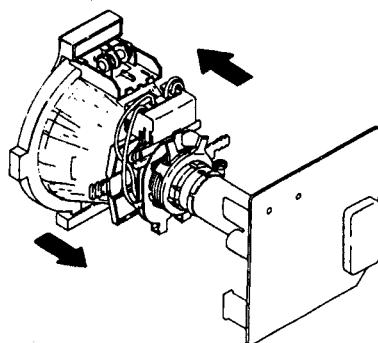


Fig. 3-1

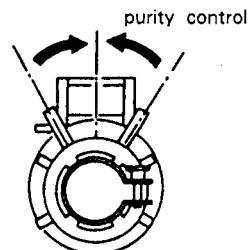


Fig. 3-2

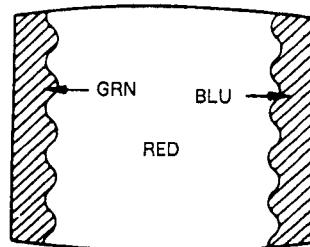


Fig. 3-3

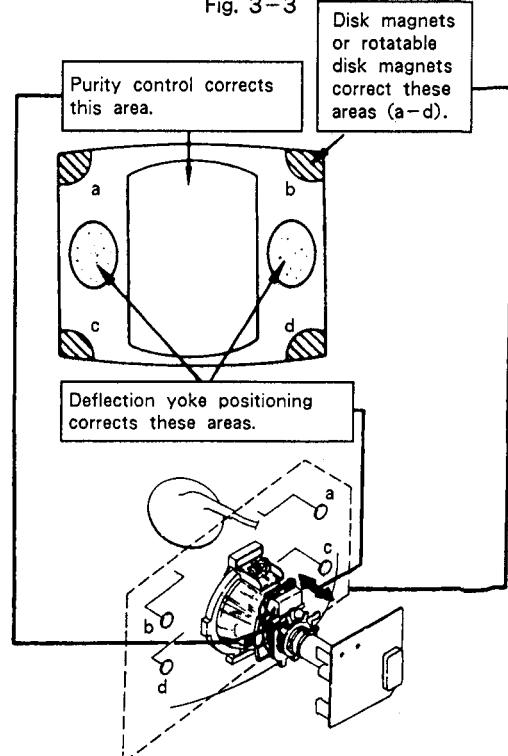


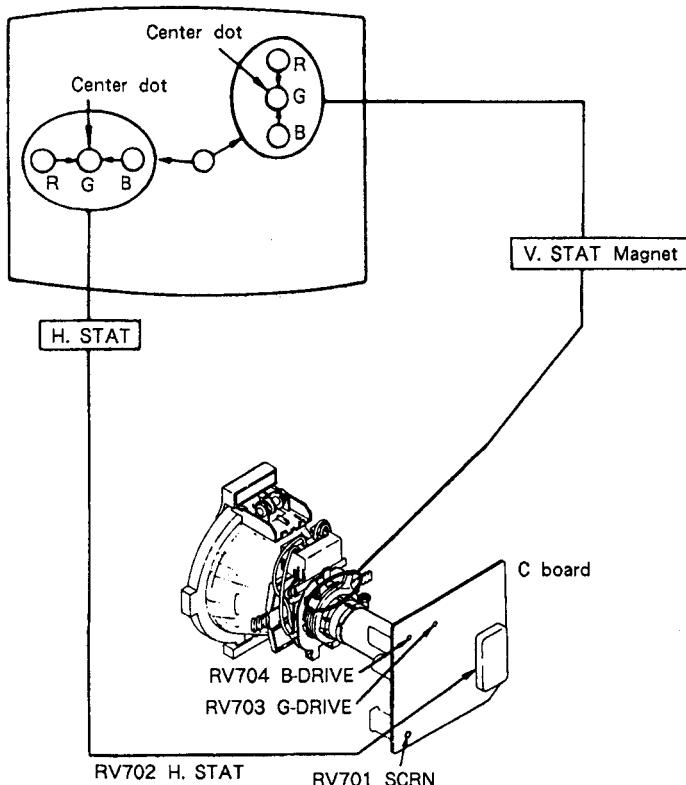
Fig. 3-4

3-2. CONVERGENCE

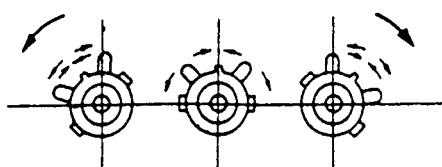
Preparation :

- Before starting, perform FOCUS, H. SIZE and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Feed in the dot pattern.

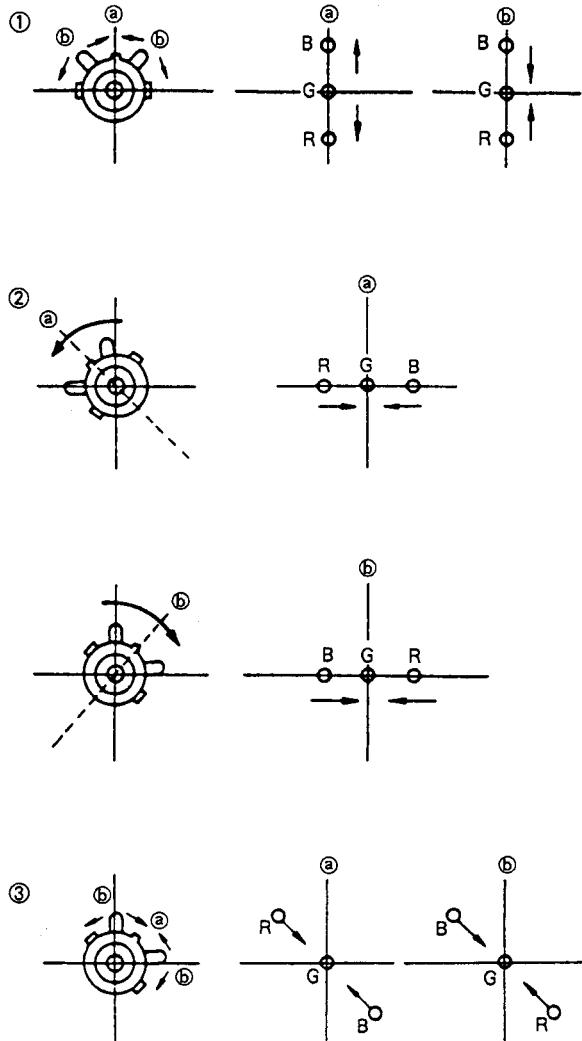
(1) Horizontal and Vertical Static Convergence



1. Adjust H. STAT VR to coincide red, green and blue dots on the center of screen.(Horizontal movement)
2. Adjust V. STAT magnet to coincide red, green and blue dots on the center of screen.(Vertical movement)
3. If the red, green and blue dots do not coincide on the center of screen with H. STAT VR, perform horizontal convergence adjustment using H. STAT VR and V. STAT magnet as shown below. (In this case, H. STAT VR and V. STAT magnet effect each other.)
- Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.



4. When the V. STAT magnet is moved in the direction of arrow ④ and ⑤, red, green and blue dots move as shown below.

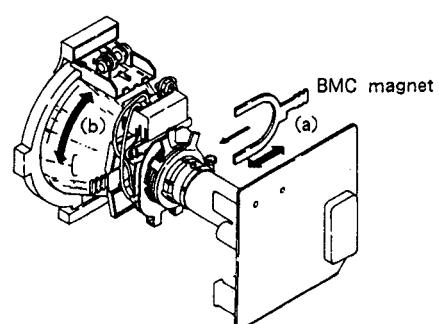


If the red and blue dots do not coincide with green dot, perform following steps.

Move BMC magnet (a) to correct insufficient H. static convergence.

Rotate BMC magnet (b) to correct insufficient V. static convergence.

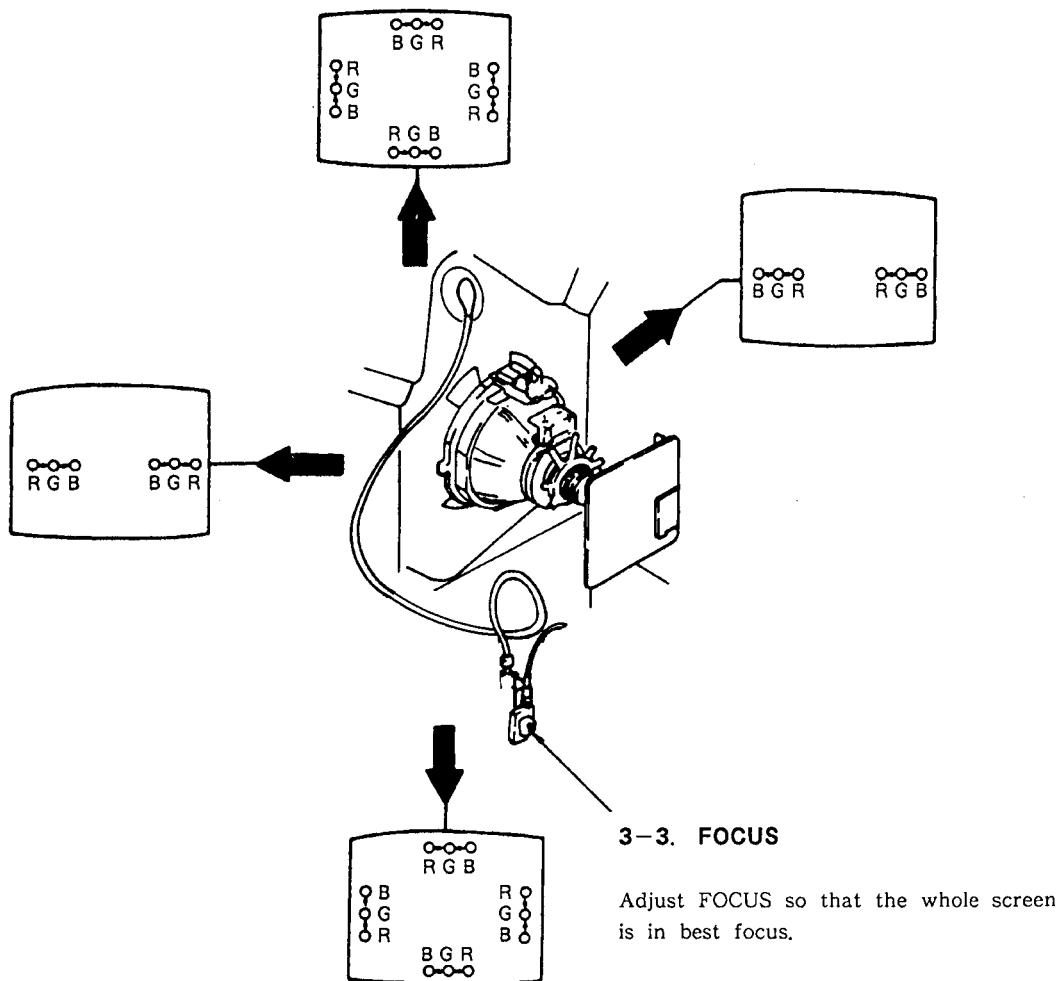
In either case, repeat Beam Landing Adjustment.



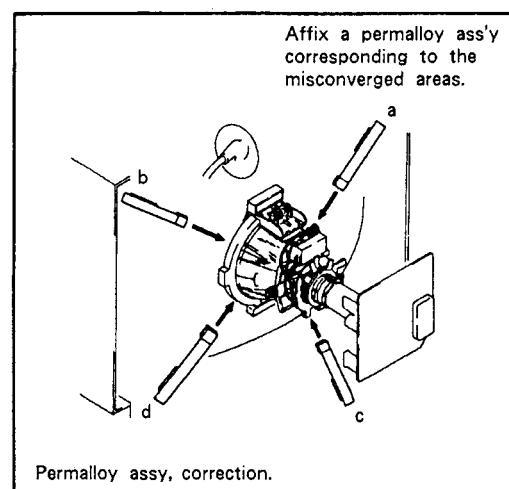
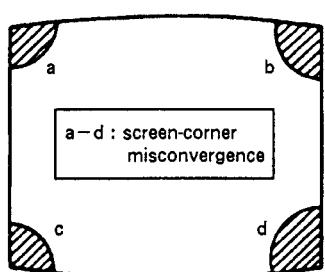
(2) Dynamic Convergence Adjustment

Preparation :

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.
- 1. Slightly loosen deflection yoke screw.
- 2. Remove deflection yoke spacers.
- 3. Move the deflection yoke for best convergence as shown below.
- 4. Tighten the deflection yoke screw.
- 5. Install the deflection yoke spacers.



(3) Screen-corner Convergence



3-4. WHITE BALANCE

{Screen (G2) Setting}

1. Input dot signals from the pattern generator.
2. Set the picture BRIGHTNESS control to the minimum level.
3. Apply 140 V DC to the cathodes of R, G, and B from an external power source.
4. While watching the picture, adjust the G2 volume (RV701) immediately before the fly-back line disappears.

{White Balance Adjustment}

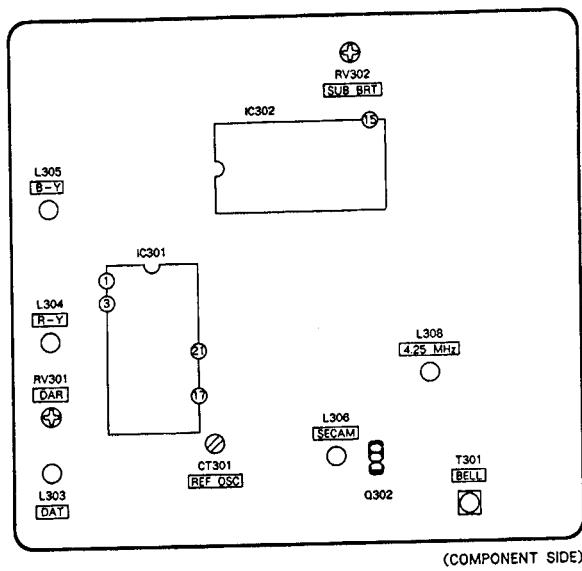
1. Input all-white signals from the pattern generator.
2. Adjust the BRIGHTNESS and COLOR controls to the standard level.
3. Adjust the white balance using RV704 (B DRIVE) and RV703 (G DRIVE).

In the following adjustments, the CONTRAST COLOR and BRIGHTNESS controls are set to normal unless otherwise specified.

SECTION 4

CIRCUIT ADJUSTMENTS

4-1. B BOARD ADJUSTMENTS

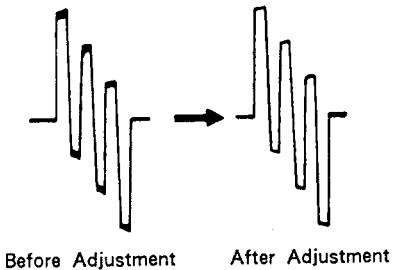


REF OSC Adjustment (CT301)

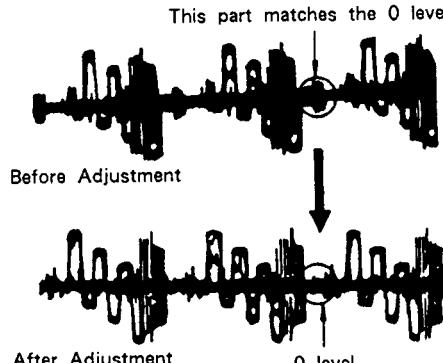
1. Input a PAL COLOR BAR pattern.
2. Short circuit between pin ⑯ of IC301 and ground.
3. Adjust CT301 to obtain color synchronization.
4. Remove the jumper wire from IC301.

1H DELAY LINE Adjustment (L303 DAT, RV301 DAR)

1. Input a PAL COLOR BAR pattern.
2. Connect the oscilloscope to pin ③ (B-Y) of IC301 and observe the waveform of the H block on the oscilloscope.
3. Adjust L303 to minimize the double waveform outline.



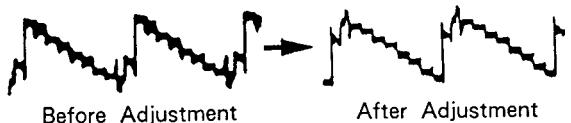
4. Input a PAL TEST COLOR BAR pattern.
5. Rotate the RV301 VR and adjust till the ANT PAL part of the waveform matches the 0 level.



6. L303 and RV301 affect each other, so repeat till the conditions of both are met.

Y TRAP 4.25 MHz Adjustment (L308)

1. Input a SECAM COLOR BAR pattern.
2. Connect pin ⑯ of IC302 to the oscilloscope and adjust L308 so that the waveform level becomes minimum.



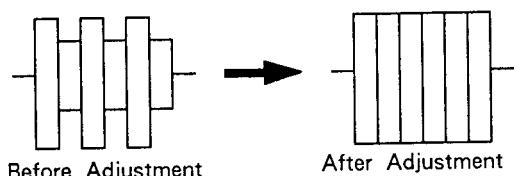
Before Adjustment After Adjustment

SECAM ID Adjustment (L306)

1. Input a SECAM COLOR BAR pattern.
2. Connect a Digital Multimeter at pin ⑩ of IC301.
3. Adjust L306 so that the indicator goes up to the maximum.

BELL FILTER Adjustment (T301)

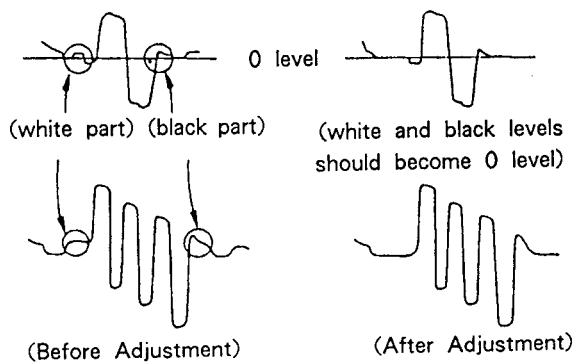
1. Input a SECAM COLOR BAR pattern.
2. Connect an oscilloscope to the Q302 emitter.
3. Adjust T301 so that the waveform becomes flat.



Before Adjustment After Adjustment

SECAM DISCRI Adjustment (L304 R-Y, L305 B-Y)

1. Input a SECAM COLOR BAR pattern.
2. Connect an oscilloscope to pin ① of IC301.
3. Adjust L304 (R-Y) so that white and black parts of the waveform of pin ① becomes 0 level.
4. Connect an oscilloscope to pin ③ of IC301.
5. Adjust L305 (B-Y) so that white and black parts of the waveform of pin ③ becomes 0 level.

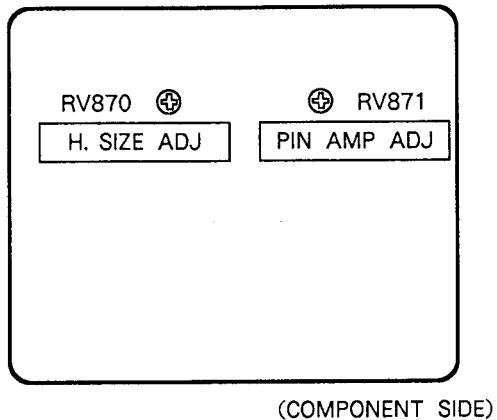


SUB BRT Adjustment (RV302)

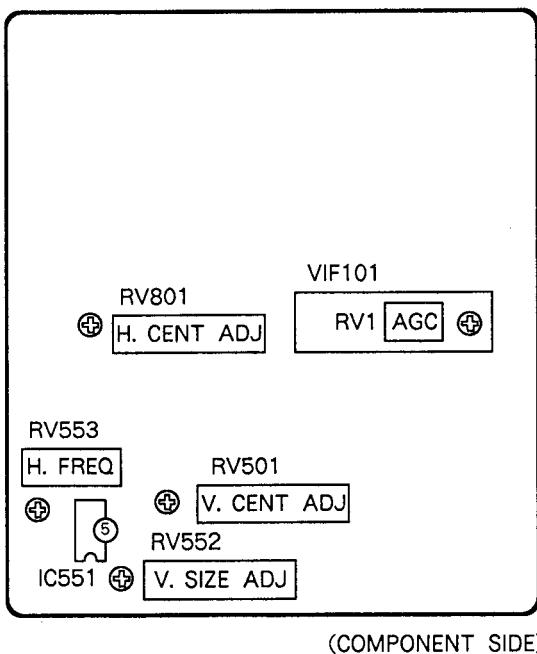
1. Input a PAL COLOR BAR signal.
2. Set CONTRAST and COLOR volume to a minimum, and set the BRIGHTNESS volume control to the mechanical center.
3. Slowly rotate SUB BRT (RV302) until the red portion is faintly illuminated.

4-2. D AND D1 BOARDS ADJUSTMENTS

D1 BOARD



D BOARD

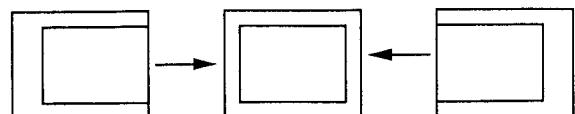


TU AGC (RF AGC)

1. Tune in air signals.
2. Adjust AGC VR (RF AGC) so that snow-noise and cross-modulation just disappear from the picture.

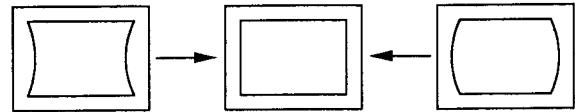
D BOARD

RV801 H.CENT (HORIZONTAL CENTER)



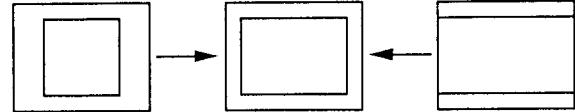
D1 BOARD

RV871 PIN. AMP



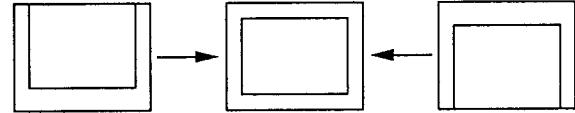
D1 BOARD

RV870 H.SIZE (HORIZONTAL SIZE)



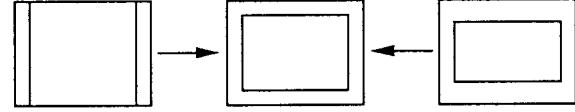
D BOARD

RV501 V.CENT (VERTICAL CENTER)



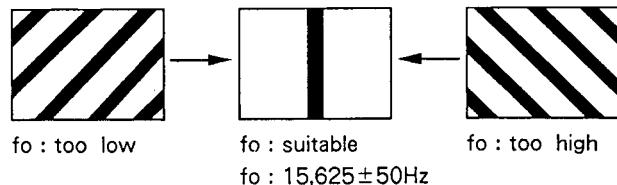
D BOARD

RV552 V.SIZE (VERTICAL SIZE)

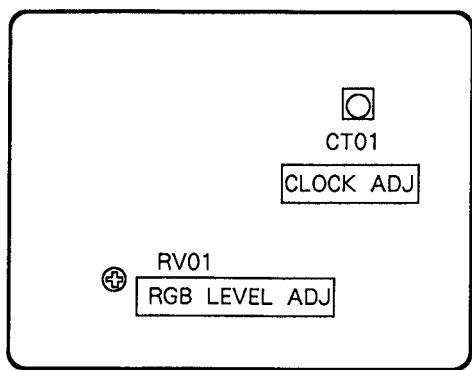


H. FREQ (RV553)

1. Input a PAL COLOR BAR signal, then connect an electrolytic capacitor ($100 \mu/16V$) between Pin ⑤ and GND of IC551.
2. Adjust RV553 (H. FREQ) to stop scrolling of the picture in the horizontal direction.
3. After adjustment, remove the electrolytic capacitor.



4-3. V BOARD ADJUSTMENTS
(KV-M2131D ONLY)



(COMPONENT SIDE)

Clock Adjustment (CT01)

1. Raise pin ③ of CNV01.
2. Set up the TELE TEXT mode.
3. Adjust CT01 to stop the pictures from scrolling.

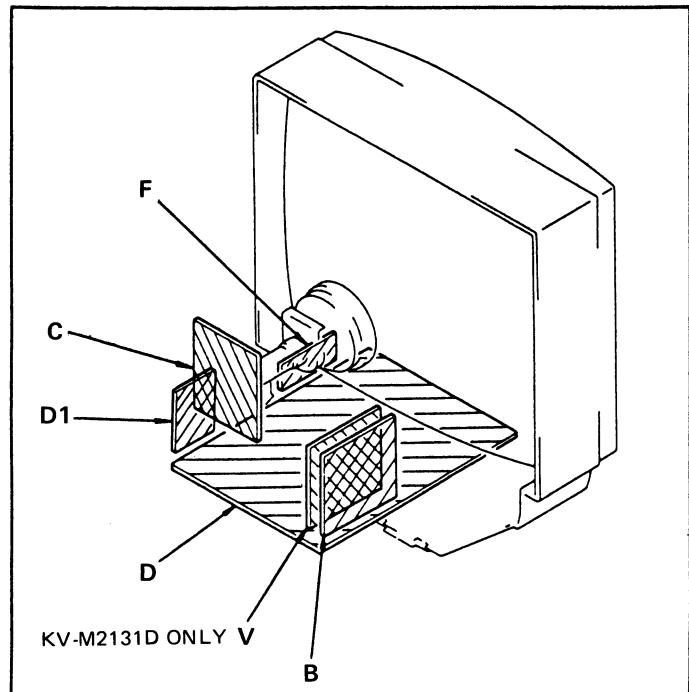
RGB Level Adjustment (RV01)

1. Set PICTURE to maximum.
2. Adjust RV01 till the RGB output becomes maximum.

SECTION 5

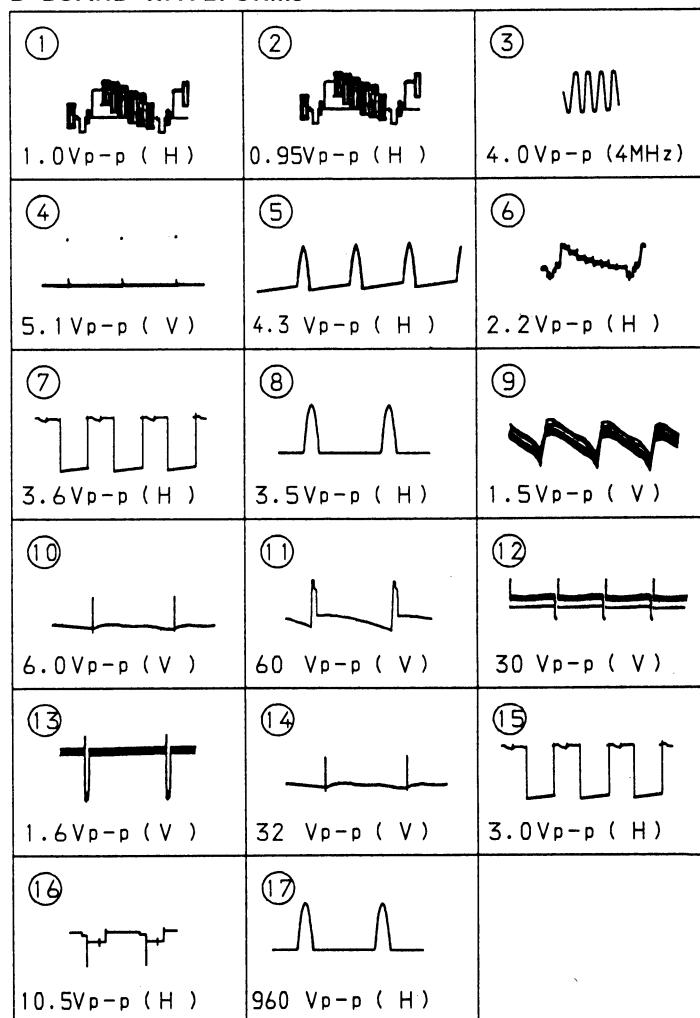
DIAGRAMS

5-1. CIRCUIT BOARDS LOCATION



5-2. SCHEMATIC DIAGRAMS

D BOARD WAVEFORMS



Note:

- All capacitors are in μ F unless otherwise noted. μ F: $\mu\mu$ F 50 WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm
Rating electrical power $\frac{1}{4}$ W

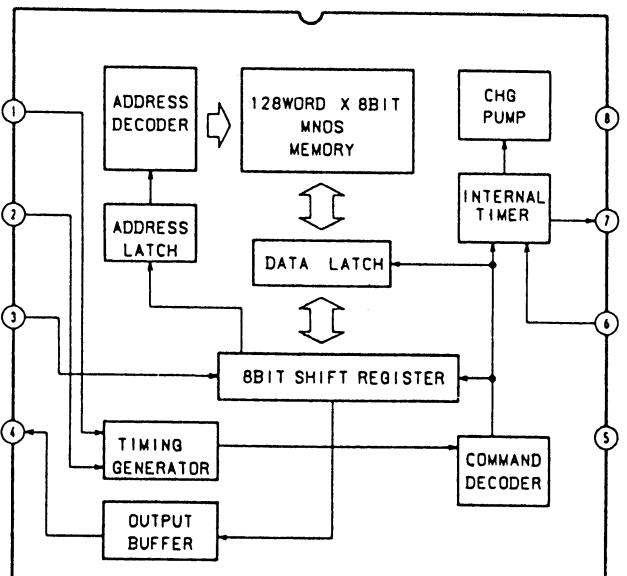
- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- : internal component.
- : panel designation, and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltages are in V.
- Readings are taken with a 10 $M\Omega$ digital multimeter.
- Readings are taken with a PAL color-bar signal input.
- Voltage variations may be noted due to normal production tolerance.
- : B + bus.
- : B - bus.
- : signal path.

Reference information

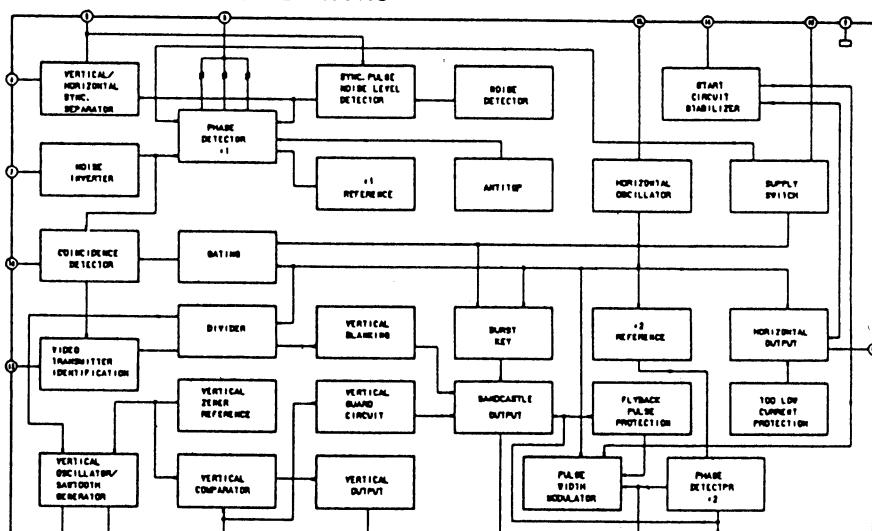
RESISTOR	: RN METAL FILM
	: RC SOLID
	: FPRD NONFLAMMABLE CARBON
	: FUSE NONFLAMMABLE FUSIBLE
	: RW NONFLAMMABLE WIREWOUND
	: RS NONFLAMMABLE METAL OXIDE
	: RB NONFLAMMABLE CEMENT
COIL	: LF-8L MICRO INDUCTOR
CAPACITOR	: TA TANTALUM
	: PS STYROL
	: PP POLYPROPYLENE
	: PT MYLAR
	: MPS METALIZED POLYESTER
	: MPP METALIZED POLYPROPYLENE
	: ALB BIPOLAR
	: ALT HIGH TEMPERATURE
	: ALR HIGH RIPPLE

Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

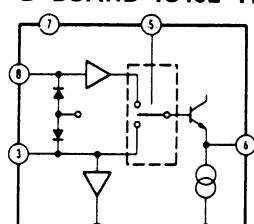
D BOARD IC002 CXK1012P

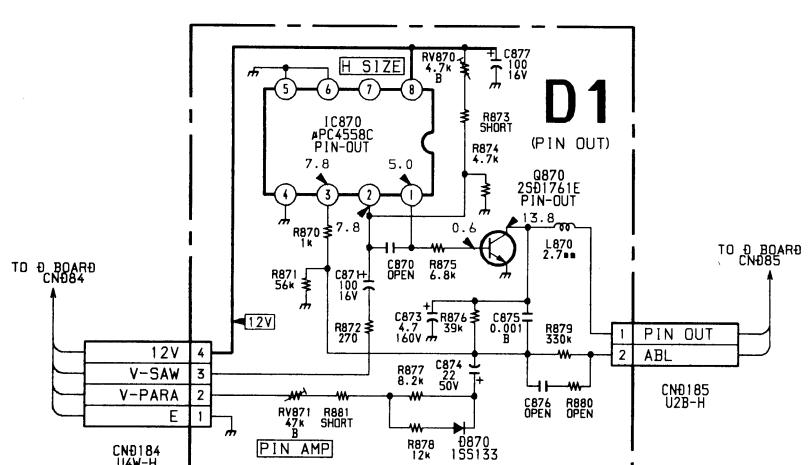
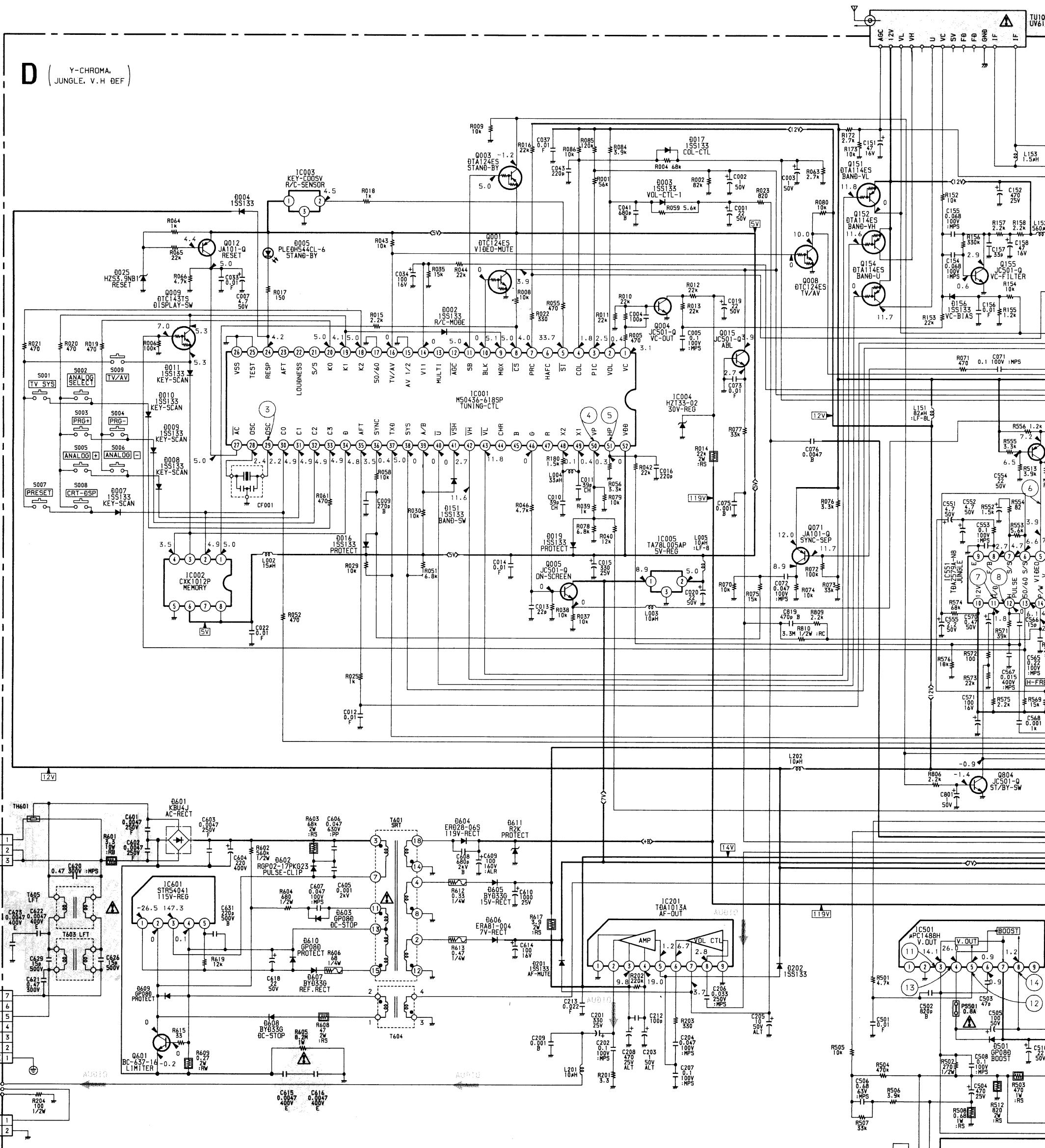


D BOARD IC551 TDA2579A-N8



D BOARD IC402 TEA2014A





A

B

C

D

E

F

G

H

I

J

K

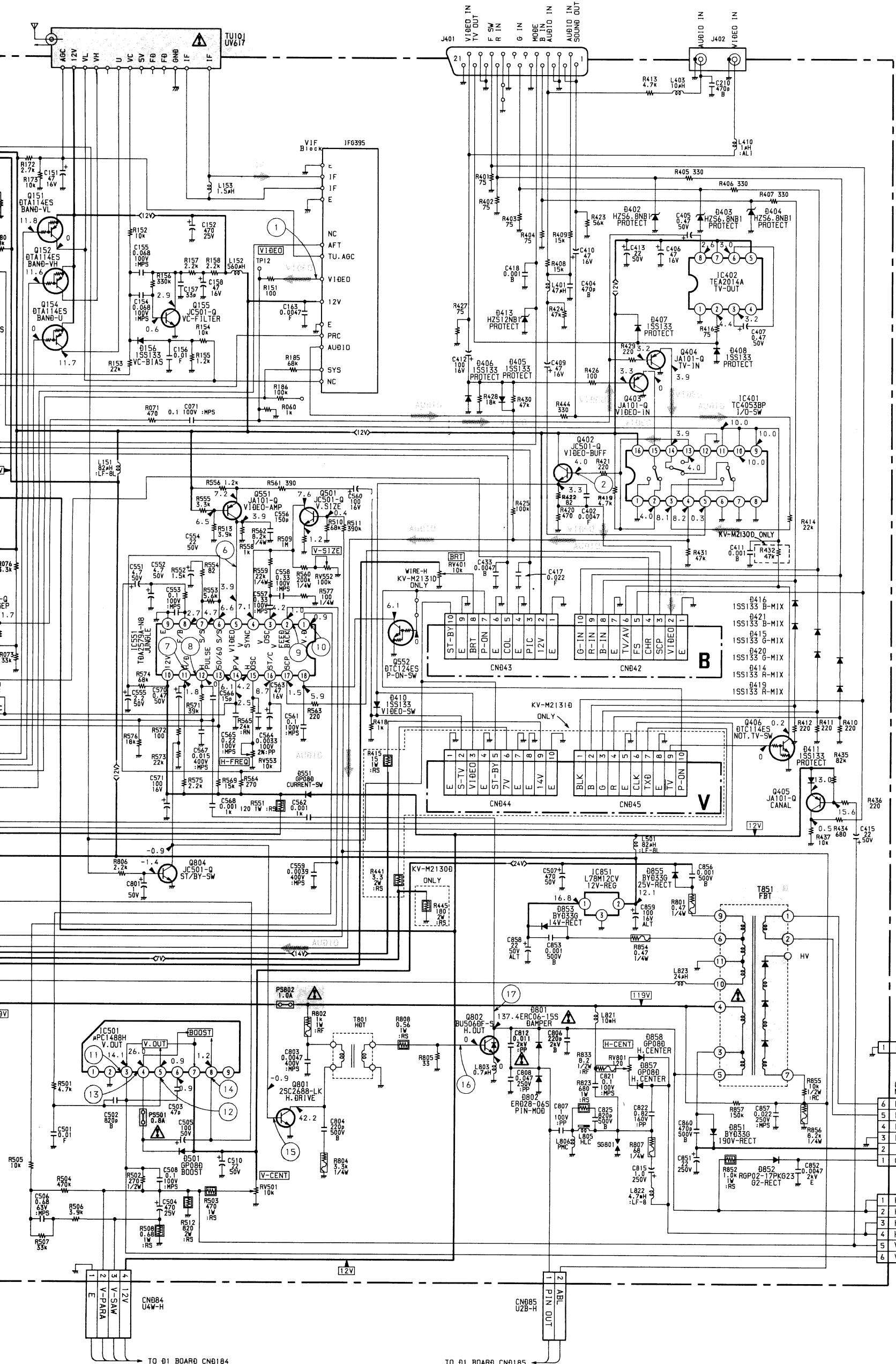
L

M

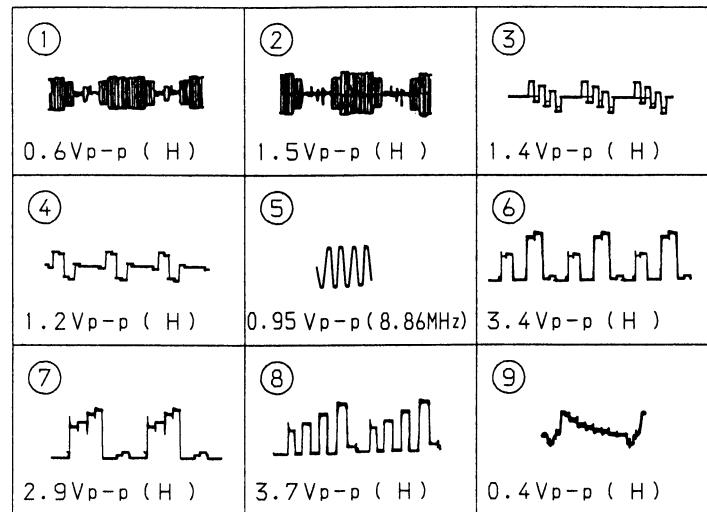
N

O

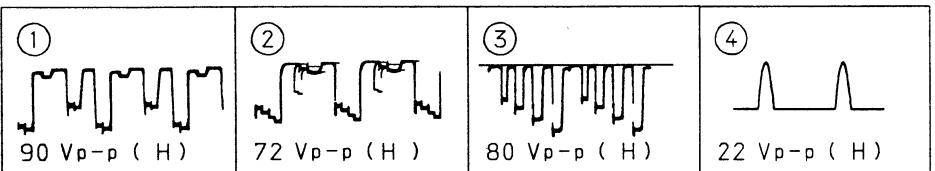
P



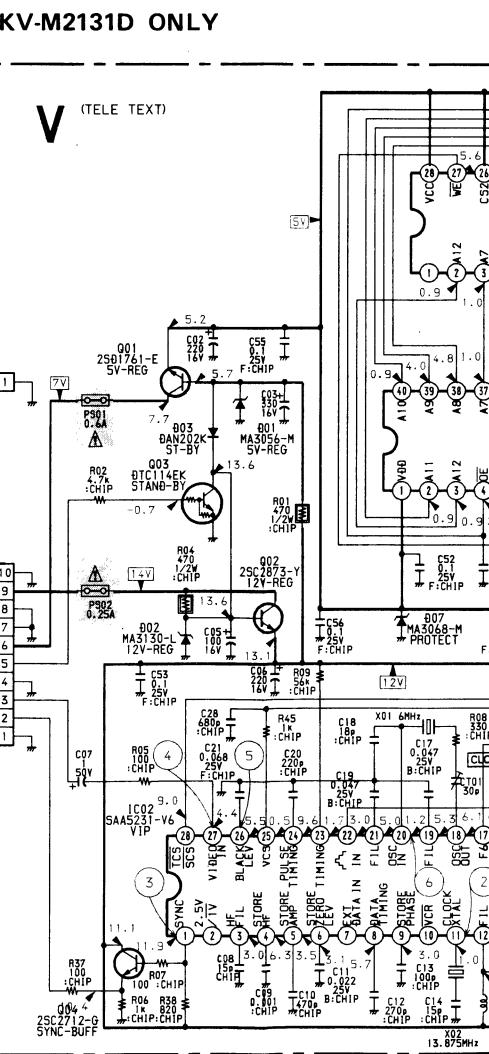
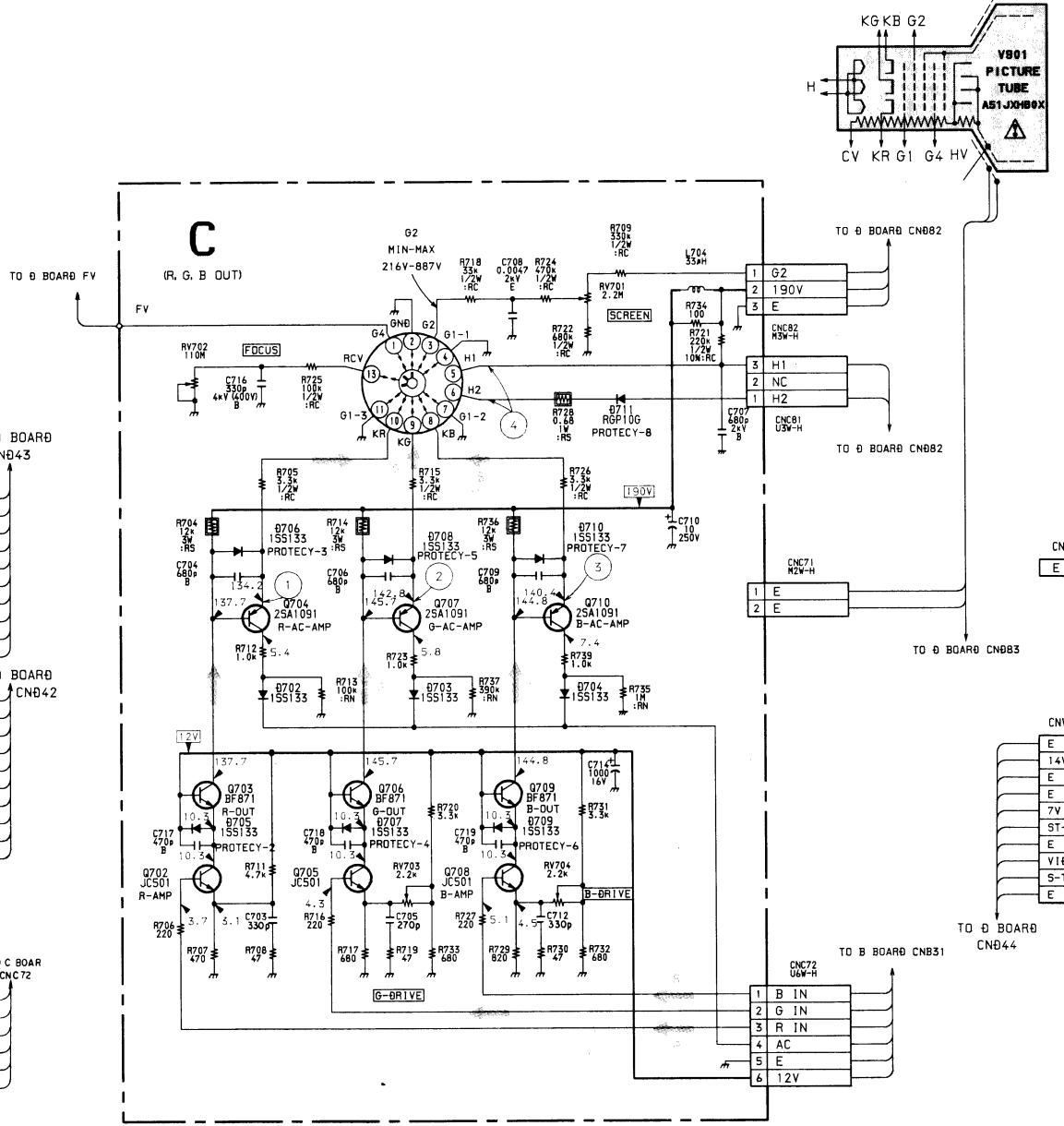
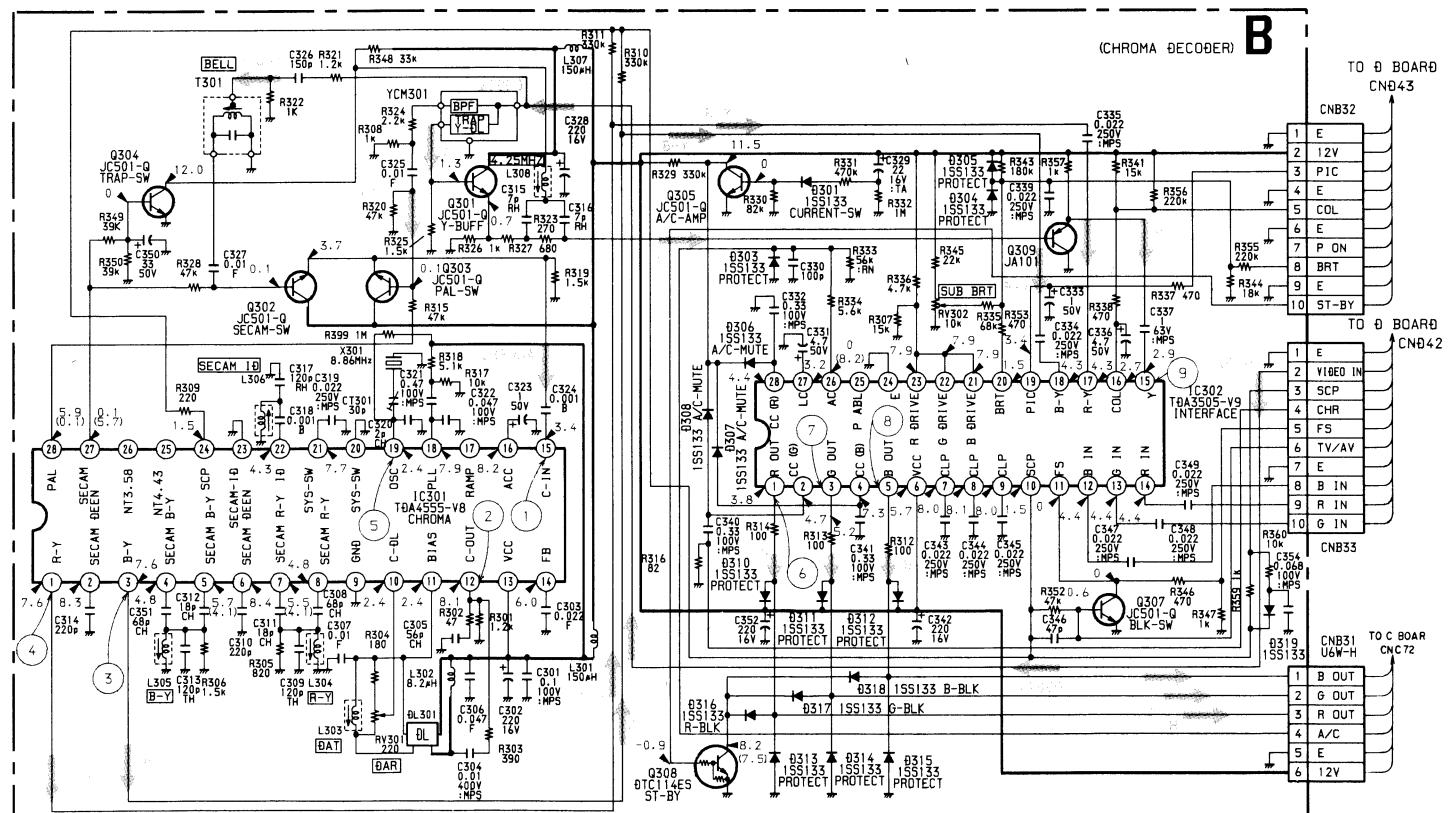
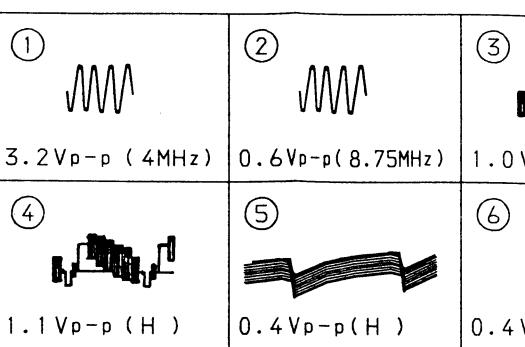
B BOARD WAVEFORMS



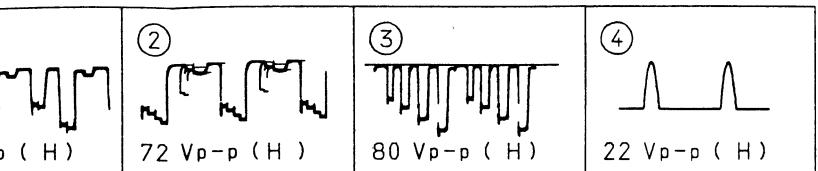
C BOARD WAVEFORMS



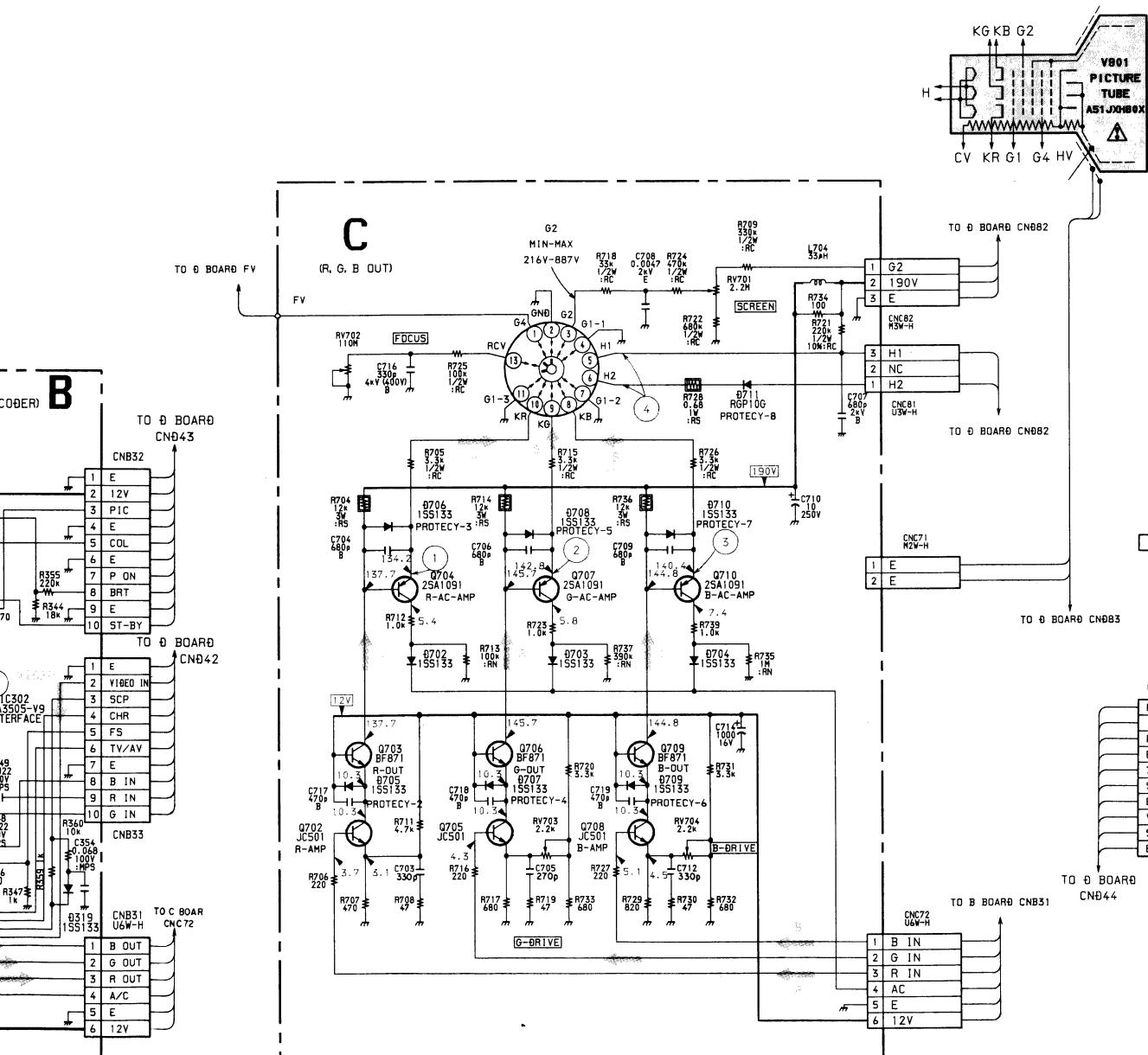
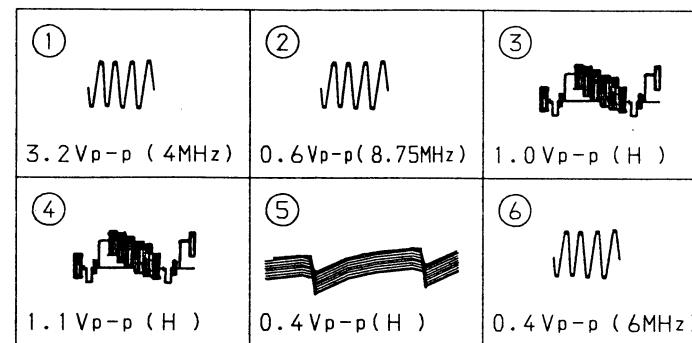
W BOARD WAVEFORMS



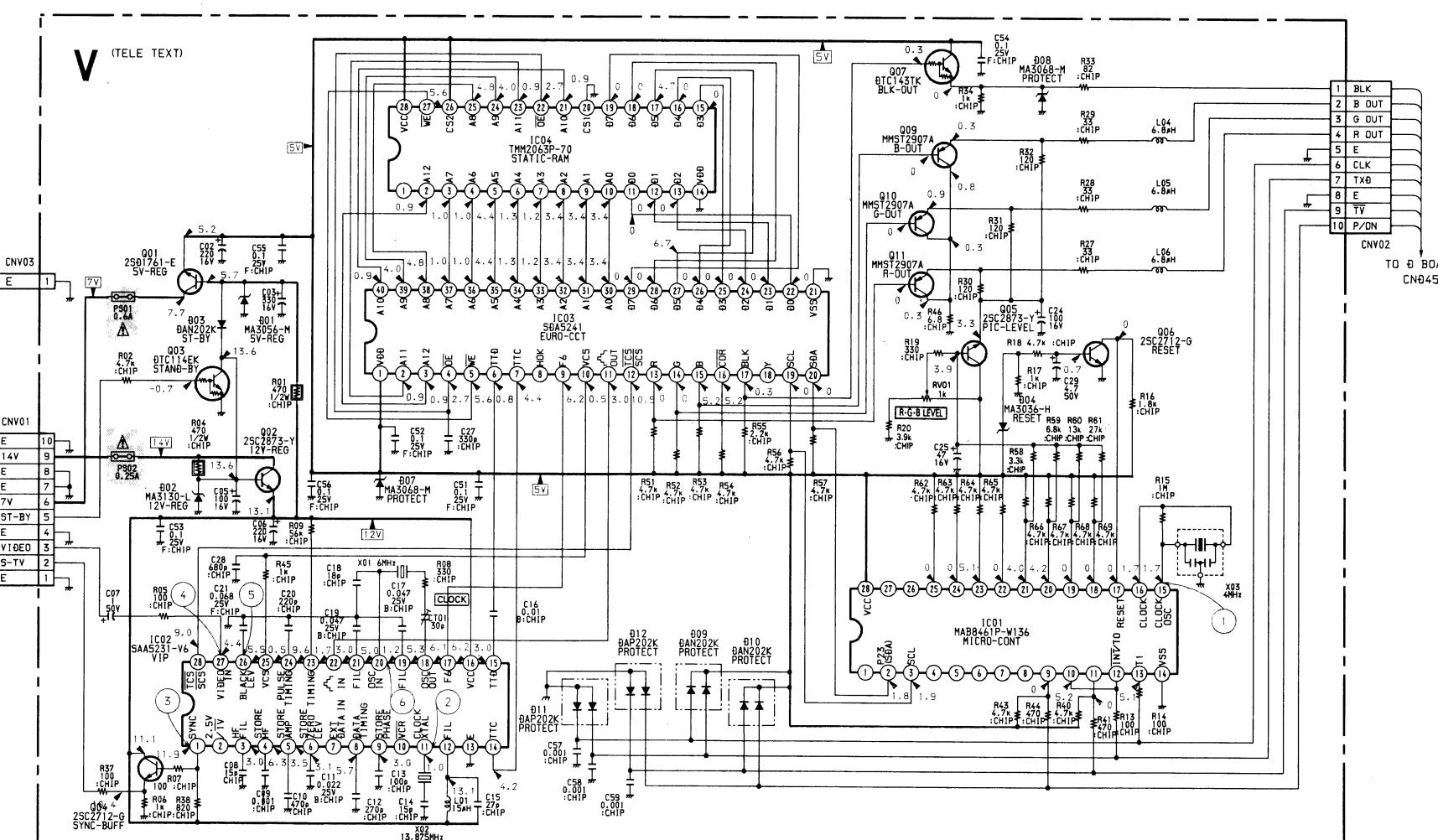
WAVEFORMS



V BOARD WAVEFORMS



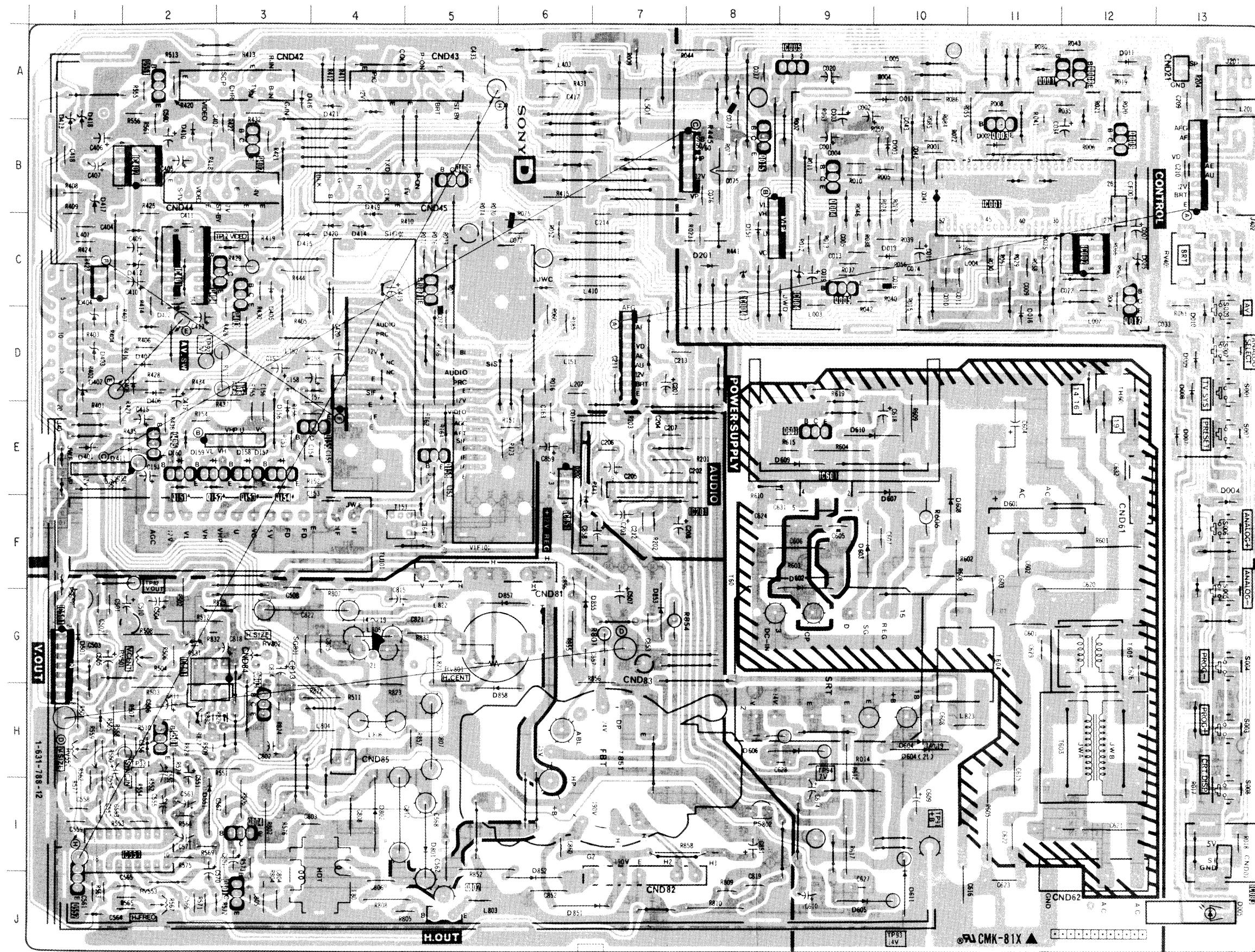
KV-M2131D ONLY



5-3. PRINTED WIRING BOARDS

D Y-CHROMA
JUNGLE, V.H DEF

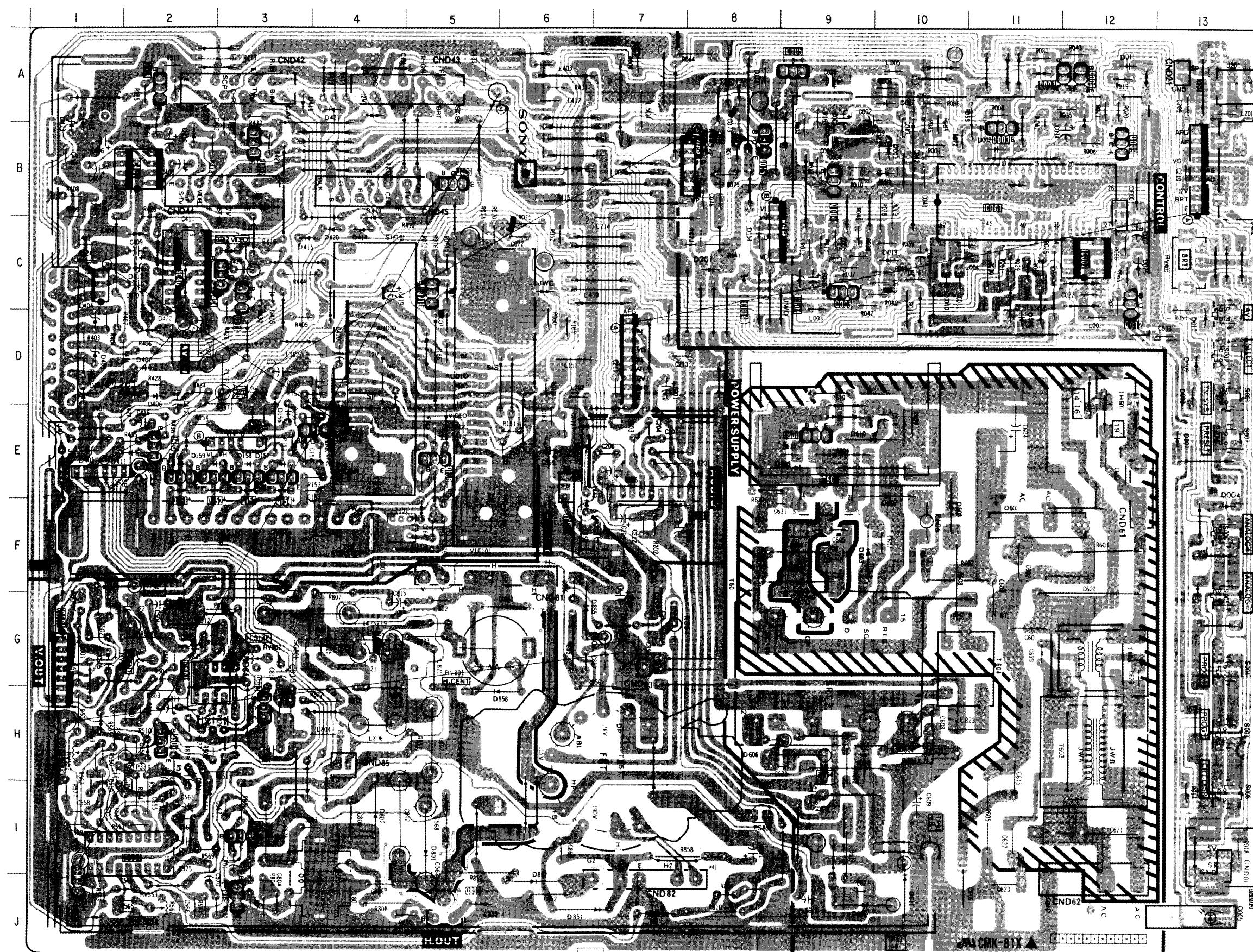
- D Board -



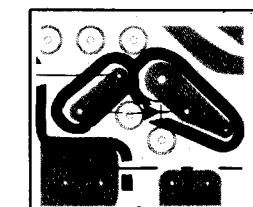
5-3. PRINTED WIRING BOARDS

- D Board -

D Y-CHROMA
JUNGLE, V.H DEF

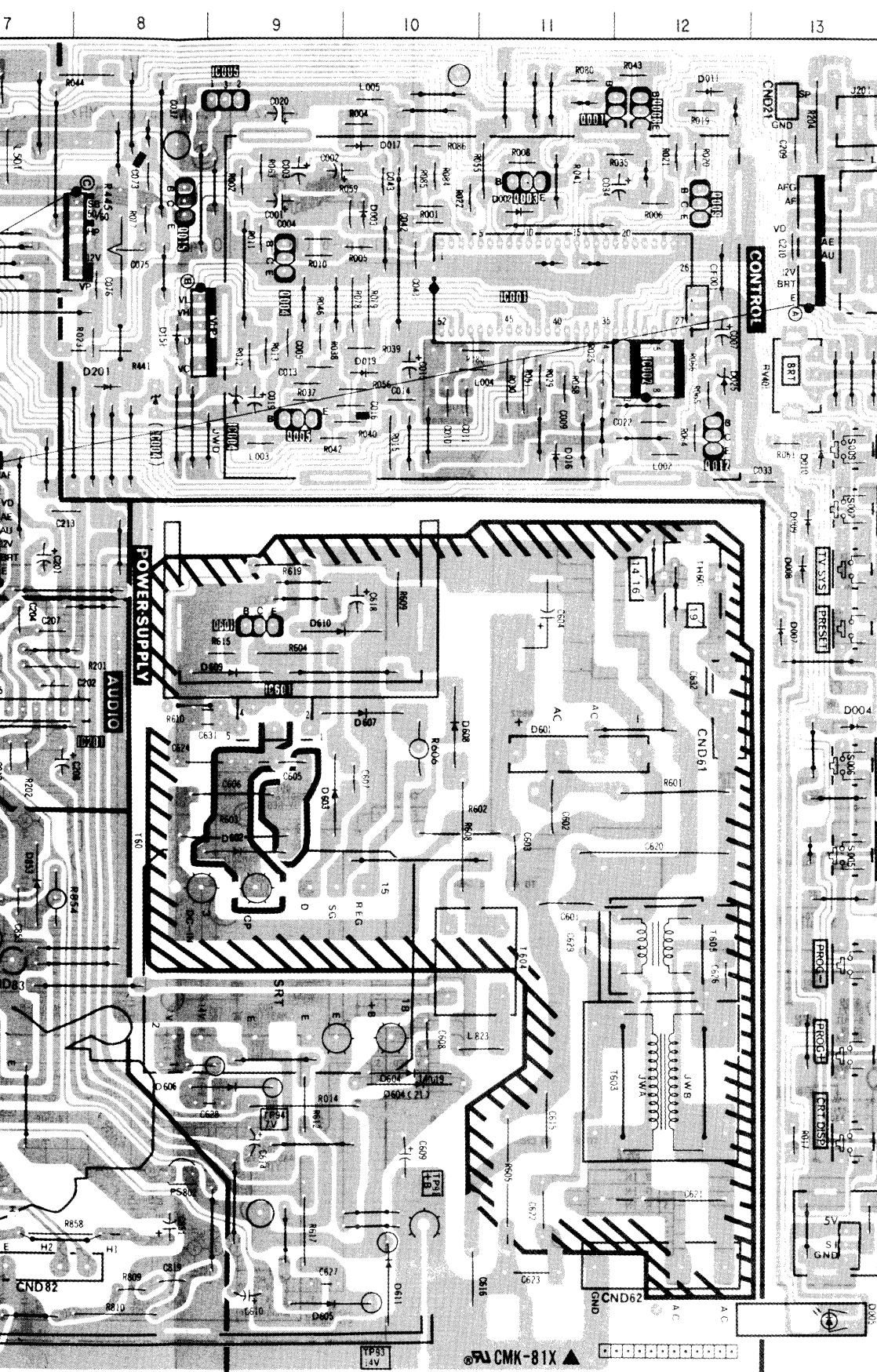


IC		
IC001	B - 11	D017 A - 10
IC002	C - 11	D019 C - 10
IC003	I - 13	D025 C - 12
IC004	C - 9	D151 C - 8
IC005	A - 9	D156 E - 3
IC201	E - 7	D201 C - 8
IC401	C - 2	D402 D - 1
IC402	B - 2	D403 D - 1
IC406	B - 5	D405 C - 3
IC501	G - 1	D406 D - 2
IC551	I - 1	D407 D - 2
IC601	E - 9	D410 B - 2
IC801	G - 2	D412 C - 2
IC851	F - 6	D413 B - 1
TRANSISTOR		
Q001	A - 11	D414 C - 4
Q003	B - 11	D415 C - 3
Q004	B - 9	D416 A - 3
Q005	C - 9	D420 C - 4
Q008	A - 12	D421 A - 4
Q009	B - 12	D501 G - 1
Q012	C - 12	D551 I - 2
Q015	B - 8	D602 F - 9
Q071	C - 5	D603 F - 9
Q151	E - 2	D604 H - 10
Q152	E - 2	D605 J - 10
Q154	E - 3	D606 H - 9
Q155	E - 5	D607 E - 10
Q158	E - 5	D608 F - 10
Q402	B - 2	D609 E - 9
Q403	C - 3	D610 E - 9
Q404	C - 3	D611 I - 10
Q405	E - 2	D801 I - 5
Q406	B - 5	D802 I - 4
Q501	H - 2	D851 J - 7
Q551	A - 2	D852 J - 6
Q552	J - 1	D853 G - 7
Q601	E - 9	D855 G - 6
Q801	J - 3	D857 F - 6
Q802	J - 5	D858 G - 6
Q803	H - 3	VARIABLE
Q804	I - 3	RESISTOR
RV401	C - 13	RV401 C - 13
RV501	G - 2	RV501 H - 1
RV552	H - 1	RV552 J - 2
RV553	J - 2	RV553 I - 1
RV562	I - 1	RV562 G - 5
RV801	G - 5	RV801
DIODE		
D002	B - 11	
D003	B - 10	
D004	F - 13	
D005	J - 13	
D007	E - 13	
D008	D - 13	
D009	D - 13	
D010	D - 13	
D011	A - 12	
D016	D - 11	



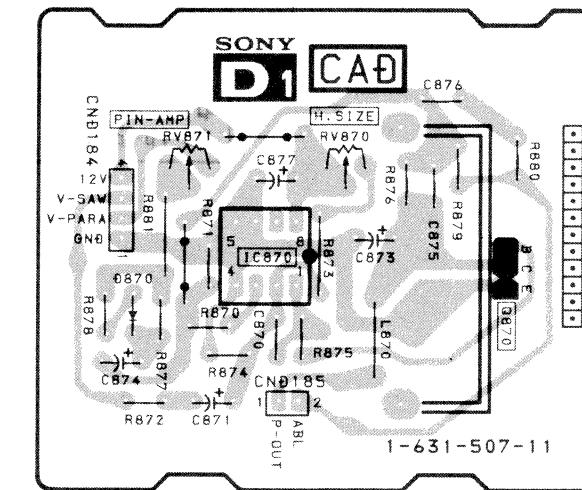
NOTE:

The circuit indicated as left contains 600 Vp-p. Care must be paid to prevent inspection or repairing.

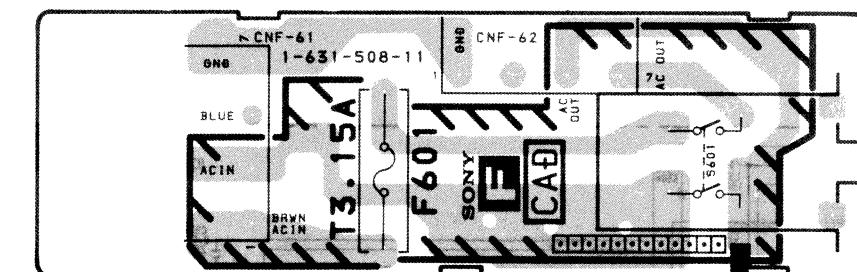


IC	
IC001	B - 11
IC002	C - 11
IC003	I - 13
IC004	C - 9
IC005	A - 9
IC201	E - 7
IC401	C - 2
IC402	B - 2
IC406	B - 5
IC501	G - 1
IC551	I - 1
IC601	E - 9
IC801	G - 2
IC851	F - 6
TRANSISTOR	
Q001	A - 11
Q003	B - 11
Q004	B - 9
Q005	C - 9
Q008	A - 12
Q009	B - 12
Q012	C - 12
Q015	B - 8
Q071	C - 5
Q151	E - 2
Q152	E - 2
Q154	E - 3
Q155	E - 5
Q158	B - 2
Q402	C - 3
Q403	C - 3
Q404	E - 2
Q405	B - 5
Q406	H - 2
Q501	A - 2
Q551	A - 2
Q552	J - 1
Q601	E - 9
Q801	J - 3
Q802	J - 5
Q803	H - 3
Q804	I - 3
VARIABLE RESISTOR	
RV401	C - 13
RV501	G - 2
RV552	H - 1
RV553	J - 2
RV562	I - 1
RV801	G - 5
DIODE	
D002	B - 11
D003	B - 10
D004	F - 13
D005	J - 13
D007	E - 13
D008	D - 13
D009	D - 13
D010	D - 13
D011	A - 12
D016	D - 11

- D1 Board -



- F Board -



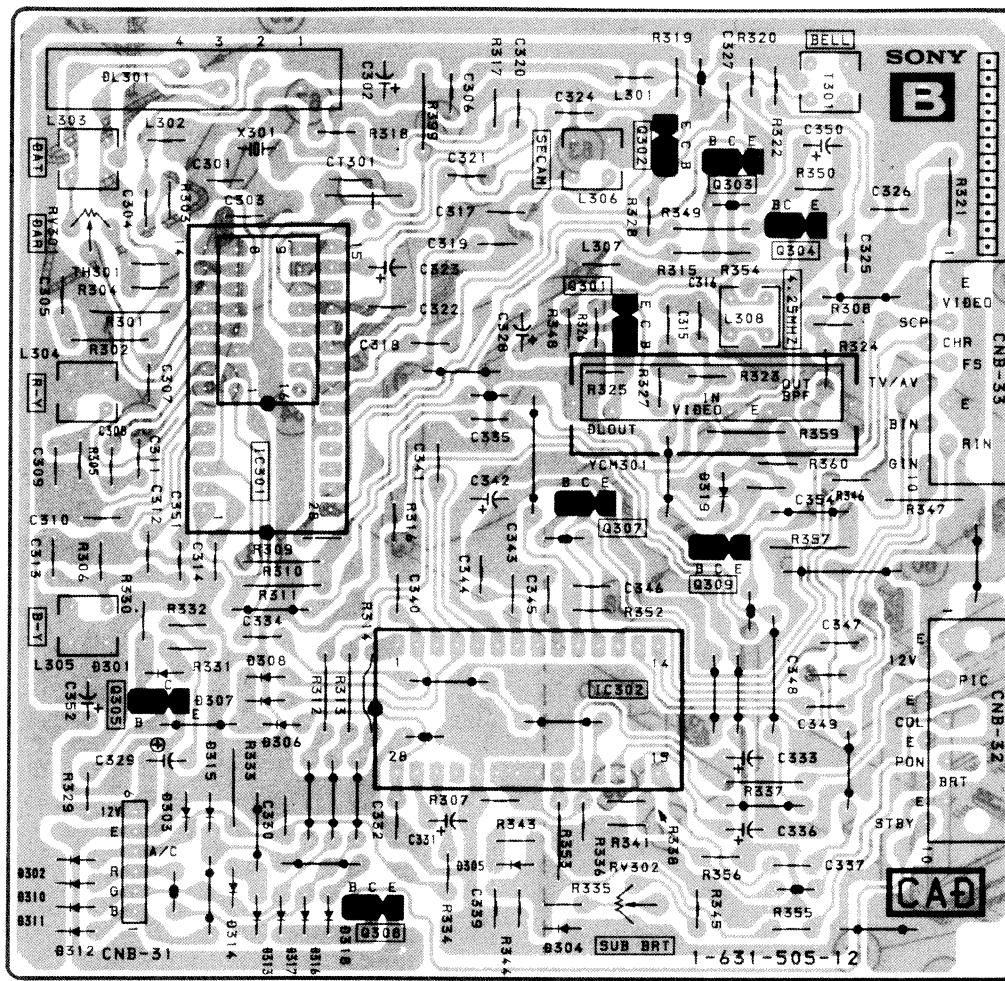
NOTE:

The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

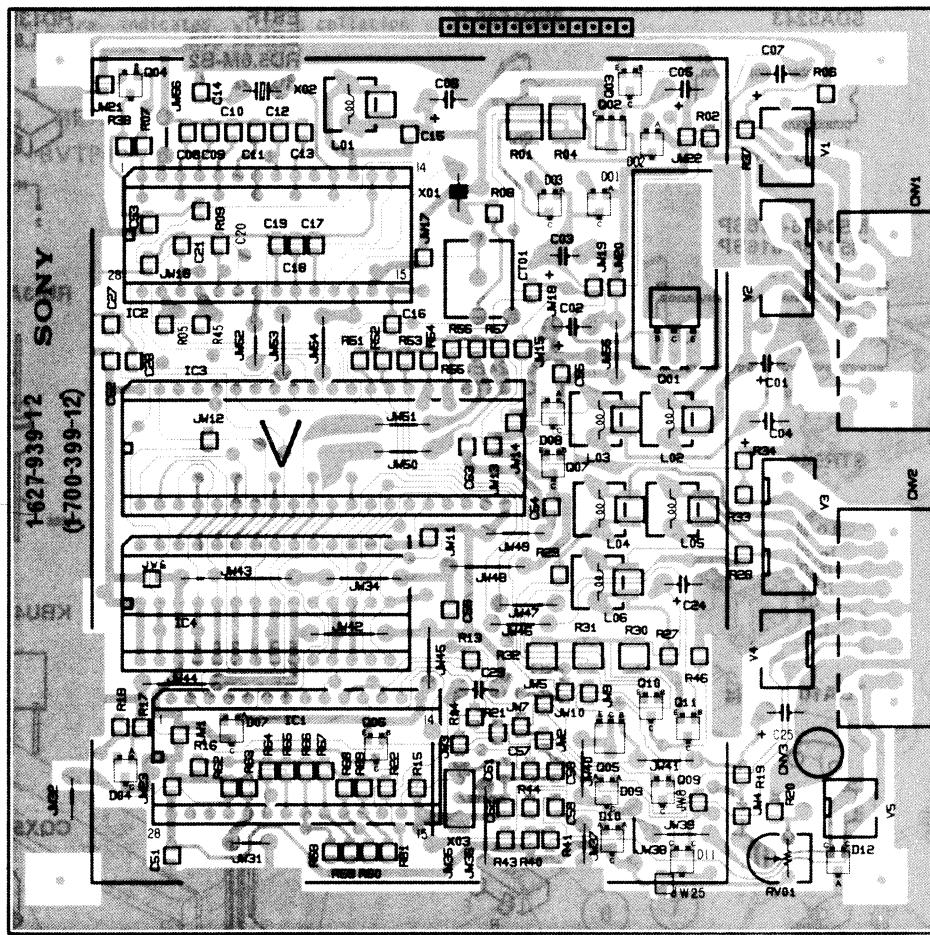
B

[CHROMA DECODER]

- B Board -

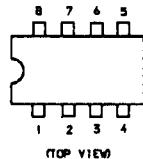


— V Board — (KV-M2131D ONLY)

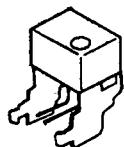


5-4. SEMICONDUCTORS

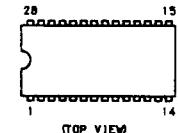
CXK1012P
RC4558P
TBA129
TEA2014A



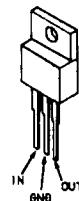
KEY-C005V



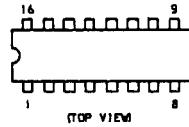
MAB8461P-W177
SAA5231-V6
TDA3505-V9
TDA4555-V8
TMM2063P-70



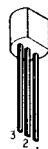
M5F78M12L
TDA8341-N6



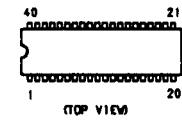
MC14053BCP
TC4053BPHB



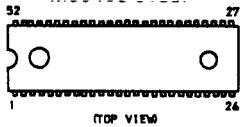
RC78L05A



SAA5243P/E-M2
SDA5243



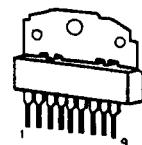
M50436-616SP
M50438-616SP



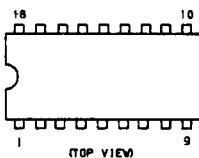
STR54041



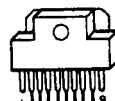
TDA1013A-N4



TDA2579A-N3



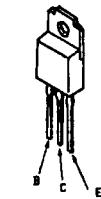
μ PC1488H



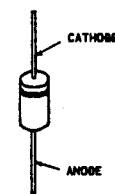
BF199
BF871
2SA733-K
2SA1091-0



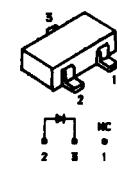
BU506DF-S
2SD1585-K



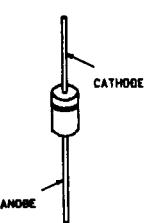
BY-D33G
ES1F
ERD28-08S
RD5.6M-B2
RGP02-17
R2K



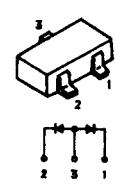
RD3.6M-B2
RD13M-B1
RD6.8M-B2



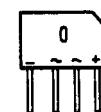
RU-3AM



DAP202K



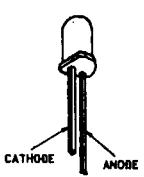
KBU4JL-6088



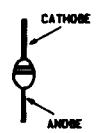
ERA83-006
RD3.9ES-B1
RD6.8ES-B1
RD12ES-B1
1SS119



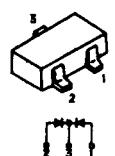
CQX51L-5



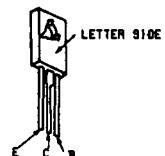
ERC06-15S
U05G



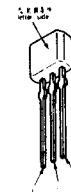
MA152WK



2SC2688-LK



2SC2785-HFE



SECTION 6

EXPLODED VIEWS

NOTE:

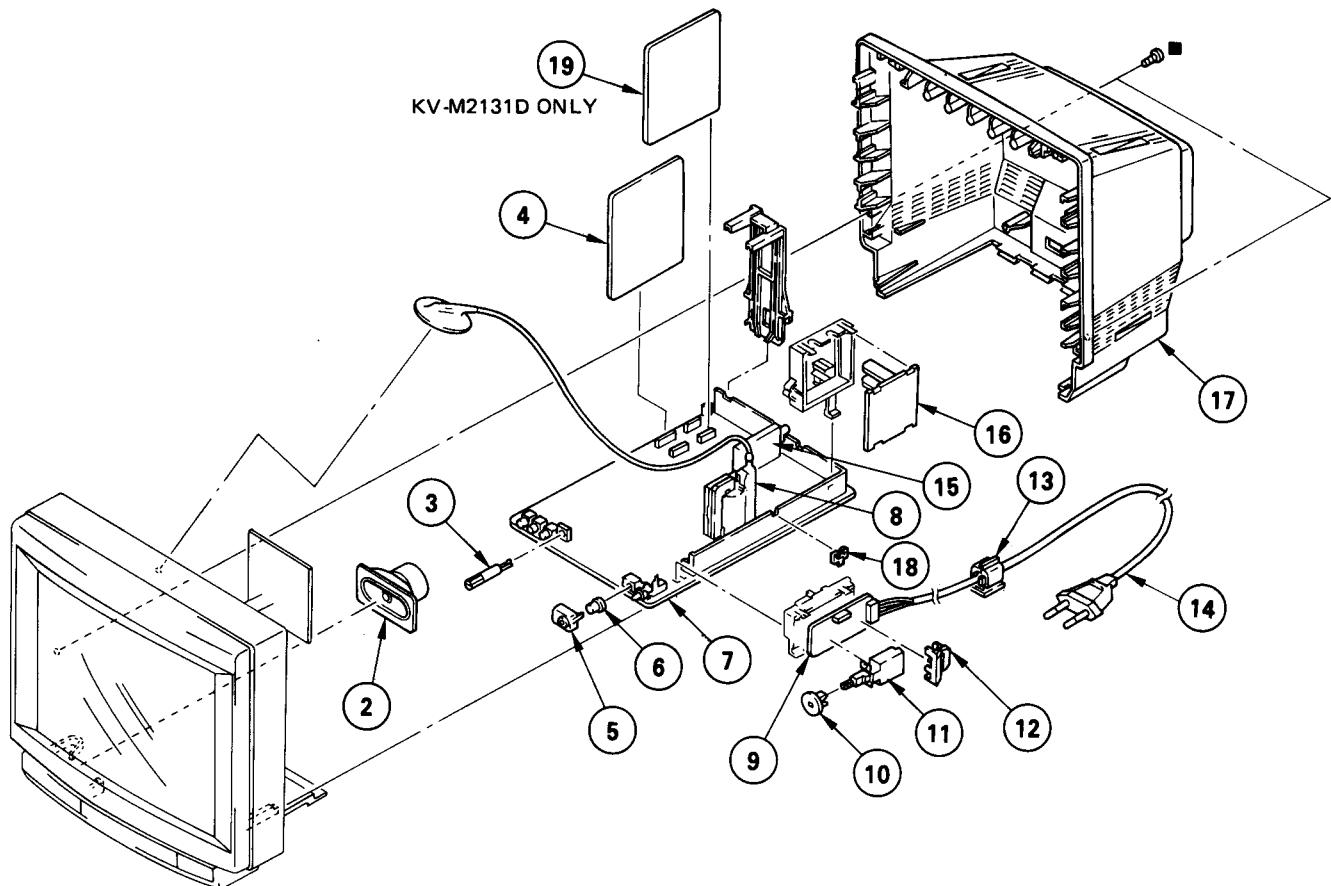
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

6-1. REAR COVER

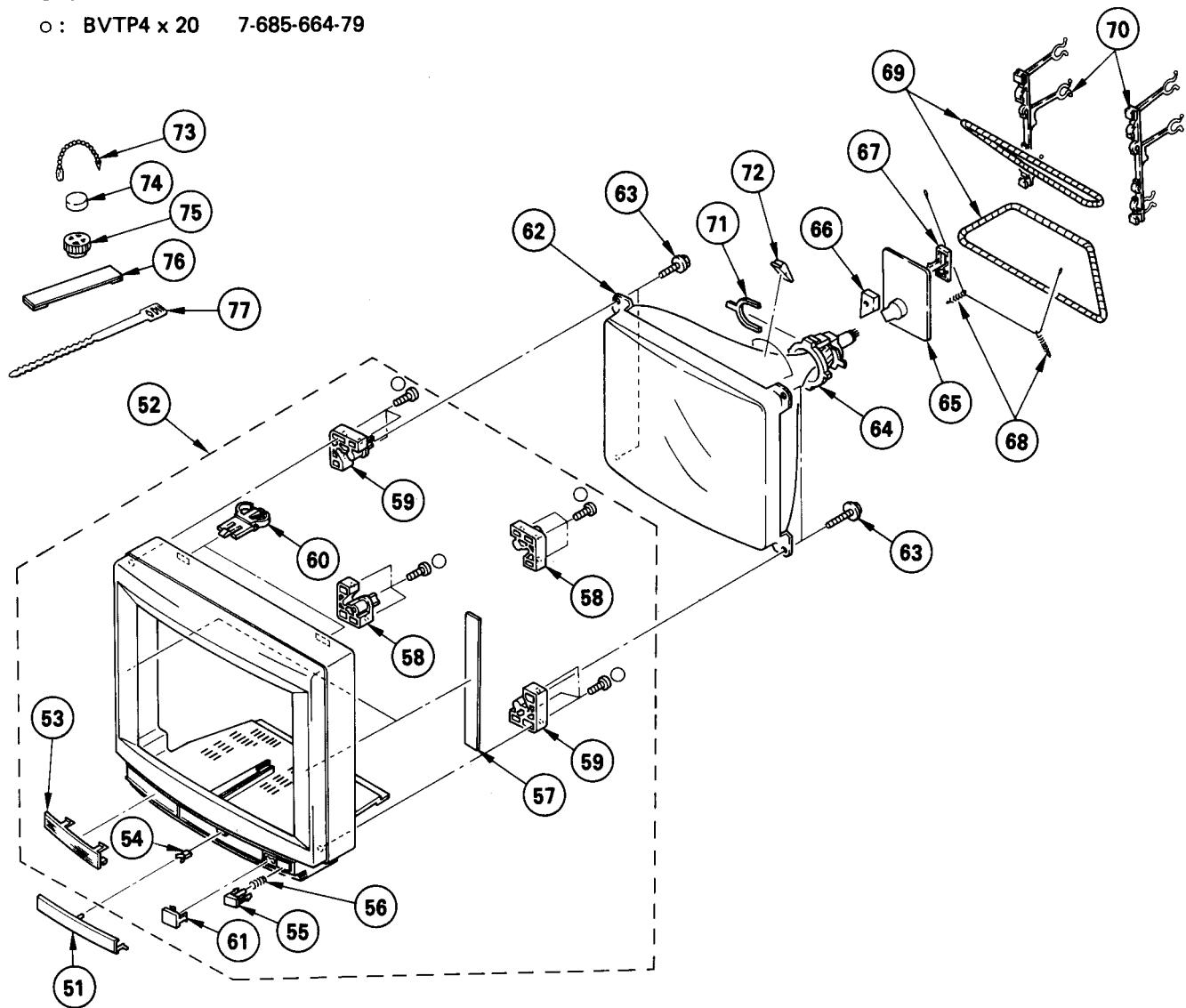
■ : BVTP4 x 16 7-685-663-79



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
2	1-503-258-21	SPEAKER		11	Δ 1-571-433-11	SWITCH, PUSH (AC POWER)	
3	4-389-302-01	KNOB, VOLUME		12	*4-386-620-01	COVER, POWER	
4	*A-1621-007-A	B BOARD, COMPLETE		13	Δ 4-389-201-02	HOLDER, AC CORD	
5	*4-381-686-01	BRACKET (B), LIGHT GUIDE		14	Δ 1-559-346-12	CORD, POWER (WITH CONNECTOR)	
6	*4-374-987-01	GUIDE, LIGHT		15	Δ 1-463-881-11	TUNER, ET (UV-617)	
7	*A-1642-023-A	D BOARD, COMPLETE (KV-M2130D ONLY)		16	*1-631-507-11	D1 BOARD	
	*A-1642-024-A	D BOARD, COMPLETE (KV-M2131D ONLY)		17	4-391-472-02	COVER, REAR	
8	Δ 1-439-416-11	TRANSFORMER ASSY, FLYBACK (UX-1600)		18	*3-646-071-00	HOLDER, WIRE	
9	*1-631-508-11	F BOARD		19	*A-1347-031-A	V BOARD, COMPLETE (KV-M2131D ONLY)	
10	4-386-611-01	COVER, SWITCH					

6-2. PICTURE TUBE

○ : BVTP4 x 20 7-685-664-79



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
51	4-200-292-01	DOOR, CONTROL (KV-M2130D ONLY)		64	1-451-295-11	DEFLECTION YOKE (Y21PFA2)	
	4-200-292-11	DOOR, CONTROL (KV-M2131D ONLY)		65	*4-1330-992-A	C BOARD, COMPLETE	
52	X-4200-042-1	CABINET ASSY (WITH BEZEL ASSY)	53-61	66	*4-379-167-01	COVER (MAIN), CV	
53	4-200-290-01	GRILLE, SPEAKER		67	*4-379-160-01	COVER (REAR LID), CV	
54	4-392-036-01	CATCHER, PUSH		68	4-369-318-00	SPRING, TENSION	
55	4-389-375-01	BUTTON, POWER		69	1-426-383-11	COIL, DEMAGNETIZATION	
56	4-367-209-00	SPRING, COMPRESSION		70	*4-386-622-01	BAND, DGC	
57	4-386-645-01	CUSHION, PICTURE TUBE		71	1-452-277-00	MAGNET, BMC	
58	*4-387-805-03	BRACKET (A), PICTURE TUBE		72	3-704-495-01	SPACER, DY	
59	*4-387-806-03	BRACKET (B), PICTURE TUBE		73	4-308-870-00	CLIP, LEAD WIRE	
60	4-387-960-01	HOLDER, REAR COVER		74	1-452-032-00	MAGNET, DISK; 10MM Ø	
61	4-200-289-01	PLATE, ORNAMENTAL		75	1-452-094-00	MAGNET, ROTATABLE DISK; 15MM Ø	
62	*4-8-738-753-05	PICTURE TUBE (A51JXH60X)		76	X-4309-608-0	PERMALLOY ASSY, CONVERGENCE	
63	4-382-733-01	SCREW (S), PT		77	3-701-007-00	BAND, BINDING	

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

SECTION 7

ELECTRICAL PARTS LIST

F

C

NOTE:

The components identified by shading and mark Δ are critical for safety.

Replace only with part number specified.

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

When indicating parts by reference number, please include the board name.

CAPACITORS

• MF : μ F, PF : $\mu\mu$ F • MMH : mH, UH : μ H

RESISTORS

- All resistors are in ohms
- F : nonflammable

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
	*1-631-508-11	F BOARD	*****	D704	8-719-911-19	DIODE ISS119	
				D705	8-719-911-19	DIODE ISS119	
				D706	8-719-911-19	DIODE ISS119	
		<CONNECTOR>		D707	8-719-911-19	DIODE ISS119	
CNF61	*1-566-664-11	PIN, CONNECTOR 4P		D708	8-719-911-19	DIODE ISS119	
CNF62	*1-566-664-11	PIN, CONNECTOR 4P		D709	8-719-911-19	DIODE ISS119	
				D710	8-719-911-19	DIODE ISS119	
				D711	8-719-300-33	DIODE RU-3AM	
		<FUSE>				<JACK>	
F601	Δ 1-576-016-11	FUSE, GLASS-TUBE (TIME-LAG) 3.15A/250V	1-533-087-00 HOLDER, FUSE; F601	J701	1-526-798-51	SOCKET, PICTURE TUBE	
						<COIL>	
S601	Δ 1-571-433-11	SWITCH, PUSH (AC POWER)		L704	1-410-878-11	INDUCTOR	33UH
						<TRANSISTOR>	
	*A-1330-992-A	C BOARD, COMPLETE	*****	Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE	
				Q703	8-729-906-70	TRANSISTOR BF871	
	*4-379-160-01	COVER (REAR LID), CV		Q704	8-729-200-17	TRANSISTOR 2SA1091-0	
	*4-379-167-01	COVER (MAIN), CV		Q705	8-729-119-78	TRANSISTOR 2SC2785-HFE	
				Q706	8-729-906-70	TRANSISTOR BF871	
		<CAPACITOR>		Q707	8-729-200-17	TRANSISTOR 2SA1091-0	
C703	1-102-820-00	CERAMIC	330PF	Q708	8-729-119-78	TRANSISTOR 2SC2785-HFE	
C704	1-102-116-00	CERAMIC	680PF	Q709	8-729-906-70	TRANSISTOR BF871	
C705	1-102-980-00	CERAMIC	270PF	Q710	8-729-200-17	TRANSISTOR 2SA1091-0	
C706	1-102-116-00	CERAMIC	680PF			<RESISTOR>	
C707	1-162-116-00	CERAMIC	680PF	Q707	1-216-487-11	METAL OXIDE	12K 5% 3W F
C708	1-162-114-00	CERAMIC	0.0047MF	Q708	1-202-824-00	SOLID	3.3K 10% 1/2W
C709	1-102-116-00	CERAMIC	680PF	Q709	1-249-409-11	CARBON	220 5% 1/4W
C710	1-123-947-00	ELECT	10MF	Q710	1-249-409-11	CARBON	470 5% 1/4W
C712	1-102-820-00	CERAMIC	330PF	Q711	1-249-413-11	CARBON	47 5% 1/4W
C714	1-124-360-00	ELECT	1000MF	Q712	1-249-417-11	CARBON	
C716	1-162-622-11	CERAMIC	330PF	Q713	1-215-469-00	METAL	100K 1% 1/6W
C717	1-102-114-00	CERAMIC	470PF	Q714	1-216-487-11	METAL OXIDE	12K 5% 3W F
C718	1-102-114-00	CERAMIC	470PF	R709	1-202-844-00	SOLID	330K 10% 1/2W
C719	1-102-114-00	CERAMIC	470PF	R711	1-249-425-11	CARBON	4.7K 5% 1/4W
				R712	1-249-417-11	CARBON	1K 5% 1/4W
		<CONNECTOR>		R713	1-215-469-00	SOLID	680 5% 1/4W
CNC71	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P		R714	1-249-401-11	CARBON	33K 10% 1/2W
CNC72	*1-560-126-00	PLUG, CONNECTOR (2.5MM) 6P		R715	1-202-824-00	SOLID	47 5% 1/4W
CNC81	*1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P		R716	1-249-409-11	CARBON	
CNC82	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P		R717	1-249-415-11	CARBON	
D702	8-719-911-19	DIODE ISS119		R718	1-202-814-11	SOLID	3.3K 10% 1/2W
D703	8-719-911-19	DIODE ISS119		R719	1-249-401-11	CARBON	680K 10% 1/2W
				R720	1-249-423-11	CARBON	47 5% 1/4W
		<DIODE>		R721	1-202-842-11	SOLID	220K 10% 1/2W
				R722	1-202-848-00	SOLID	680K 10% 1/2W
				R723	1-249-417-11	CARBON	1K 5% 1/4W
				R724	1-202-846-00	SOLID	470K 10% 1/2W

C **D1** **V**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R725	1-202-838-00	SOLID	100K 10% 1/2W	R877	1-249-428-11	CARBON	8.2K 5% 1/4W
R726	1-202-824-00	SOLID	3.3K 10% 1/2W	R878	1-249-430-11	CARBON	12K 5% 1/4W
R727	1-249-409-11	CARBON	220 5% 1/4W	R879	1-247-891-00	CARBON	330K 5% 1/4W
R728	1-216-347-11	METAL OXIDE	0.68 5% 1W				
R729	1-249-416-11	CARBON	820 5% 1/4W				
R730	1-249-401-11	CARBON	47 5% 1/4W				
R731	1-249-423-11	CARBON	3.3K 5% 1/4W				
R732	1-249-415-11	CARBON	680 5% 1/4W				
R733	1-249-415-11	CARBON	680 5% 1/4W				
R734	1-249-405-11	CARBON	100 5% 1/4W				
R735	1-215-493-00	METAL	1M 1% 1/6W				
R736	1-216-487-11	METAL OXIDE	12K 5% 3W				
R737	1-215-483-00	METAL	390K 1% 1/6W				
R739	1-249-417-11	CARBON	1K 5% 1/4W				
<VARIABLE RESISTOR>							
RV701	1-230-641-11	RES, ADJ, METAL GLAZE	2.2M				
RV702	1-230-619-11	RES, ADJ, METAL GLAZE	110M				
RV703	1-237-749-11	RES, ADJ, CARBON	2200				
RV704	1-237-749-11	RES, ADJ, CARBON	2200				

*1-631-507-11 D1 BOARD				C02	1-124-120-11	ELECT	220MF 20% 16V
*****				C03	1-124-119-00	ELECT	330MF 20% 16V
*****				C05	1-126-101-11	ELECT	100MF 20% 16V
*****				C06	1-124-120-11	ELECT	220MF 20% 16V
*****				C07	1-124-791-11	ELECT	1MF 20% 50V

C08				C08	1-163-097-00	CERAMIC CHIP	15PF 5% 50V
C09				C09	1-163-141-00	CERAMIC CHIP	0.001MF 5% 50V
C10				C10	1-163-133-00	CERAMIC CHIP	470PF 5% 50V
C11				C11	1-163-037-11	CERAMIC CHIP	0.022MF 10% 25V
C12				C12	1-163-127-00	CERAMIC CHIP	270PF 5% 50V

C13				C13	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
C14				C14	1-163-097-00	CERAMIC CHIP	15PF 5% 50V
C15				C15	1-163-103-00	CERAMIC CHIP	27PF 5% 50V
C16				C16	1-164-232-11	CERAMIC CHIP	0.01MF 10% 50V
C17				C17	1-163-809-11	CERAMIC CHIP	0.047MF 10% 25V

C18				C18	1-163-099-00	CERAMIC CHIP	18PF 5% 50V
C19				C19	1-163-809-11	CERAMIC CHIP	0.047MF 10% 25V
C20				C20	1-163-125-00	CERAMIC CHIP	220PF 5% 50V
C21				C21	1-163-833-00	CERAMIC CHIP	0.068MF 25V
C24				C24	1-126-101-11	ELECT	100MF 20% 16V

C25				C25	1-124-477-11	ELECT	47MF 20% 16V
C27				C27	1-163-129-00	CERAMIC CHIP	330PF 5% 50V
C28				C28	1-163-137-00	CERAMIC CHIP	680PF 5% 50V
C29				C29	1-124-927-11	ELECT	4.7MF 20% 50V
C51				C51	1-163-038-00	CERAMIC CHIP	0.1MF 25V

C52				C52	1-163-038-00	CERAMIC CHIP	0.1MF 25V
C53				C53	1-163-038-00	CERAMIC CHIP	0.1MF 25V
C54				C54	1-163-038-00	CERAMIC CHIP	0.1MF 25V
C55				C55	1-163-038-00	CERAMIC CHIP	0.1MF 25V
C56				C56	1-163-038-00	CERAMIC CHIP	0.1MF 25V

C57				C57	1-163-141-00	CERAMIC CHIP	0.001MF 5% 50V
C58				C58	1-163-141-00	CERAMIC CHIP	0.001MF 5% 50V
C59				C59	1-163-141-00	CERAMIC CHIP	0.001MF 5% 50V

<TRANSISTOR>				<CONNECTOR>			
Q870	8-729-107-26	TRANSISTOR	2SD1585-K				
*4-368-683-01 SPRING; Q870				CNV01	*1-565-393-11	CONNECTOR, BOARD TO BOARD	
CND184*1-560-124-00 PLUG, CONNECTOR (2.5MM) 4P				CNV02	*1-565-393-11	CONNECTOR, BOARD TO BOARD	
CND185*1-560-290-00 PLUG, CONNECTOR (2.5MM PITCH)				CNV03	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P	

<RESISTOR>				<TRIMMER>			
R870	1-249-417-11	CARBON	1K 5% 1/4W	CT01	1-141-392-11	CAP, VAR, TRIMMER (1 GANG)	
R871	1-249-438-11	CARBON	56K 5% 1/4W				
R872	1-249-410-11	CARBON	270 5% 1/4W				
R874	1-249-425-11	CARBON	4.7K 5% 1/4W				
R875	1-249-427-11	CARBON	6.8K 5% 1/4W				
R876	1-249-436-11	CARBON	39K 5% 1/4W				
<DIODE>				D01	8-719-105-91	DIODE RD5.6M-B2	

The components identified by shading and mark **A** are critical for safety.

Replace only with part number specified.

V

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
D02	8-719-106-79	DIODE RD13M-B1		JW22	1-216-295-00	METAL GLAZE 0	5% 1/10W
D03	8-719-400-18	DIODE MA152WK		JW23	1-216-295-00	METAL GLAZE 0	5% 1/10W
D04	8-719-105-52	DIODE RD3.6M-B2		JW24	1-216-295-00	METAL GLAZE 0	5% 1/10W
D07	8-719-106-17	DIODE RD6.8M-B2		JW25	1-216-295-00	METAL GLAZE 0	5% 1/10W
D08	8-719-106-17	DIODE RD6.8M-B2		R01	1-218-326-11	METAL GLAZE 470	5% 1/2W
D09	8-719-400-18	DIODE MA152WK		R02	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
D10	8-719-400-18	DIODE MA152WK		R04	1-218-326-11	METAL GLAZE 470	5% 1/2W
D11	8-719-914-44	DIODE DAP202K		R05	1-216-025-00	METAL GLAZE 100	5% 1/10W
D12	8-719-914-44	DIODE DAP202K		R06	1-216-049-00	METAL GLAZE 1K	5% 1/10W
<IC>				R07	1-216-025-00	METAL GLAZE 100	5% 1/10W
IC1	8-759-986-92	IC MAB-8461P-W177		R08	1-216-037-00	METAL GLAZE 330	5% 1/10W
IC2	8-759-972-96	IC SAA5231-V6		R09	1-216-091-00	METAL GLAZE 56K	5% 1/10W
IC3	8-759-032-98	IC SDA5243		R13	1-216-025-00	METAL GLAZE 100	5% 1/10W
IC4	8-759-230-68	IC TMM2063P-70		R14	1-216-025-00	METAL GLAZE 100	5% 1/10W
<COIL>				R15	1-216-121-00	METAL GLAZE 1M	5% 1/10W
L01	1-408-411-00	INDUCTOR 15UH		R16	1-216-055-00	METAL GLAZE 1.8K	5% 1/10W
L04	1-408-407-00	INDUCTOR 6.8UH		R17	1-216-049-00	METAL GLAZE 1K	5% 1/10W
L05	1-408-407-00	INDUCTOR 6.8UH		R18	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
L06	1-408-407-00	INDUCTOR 6.8UH		R19	1-216-037-00	METAL GLAZE 330	5% 1/10W
<IC LINK>				R20	1-216-063-00	METAL GLAZE 3.9K	5% 1/10W
PS01A	1-532-679-91	LINK, IC (ICP-N15) 0.6A		R27	1-216-013-00	METAL GLAZE 33	5% 1/10W
PS02A	1-532-727-91	LINK, IC 0.25A		R28	1-216-013-00	METAL GLAZE 33	5% 1/10W
<TRANSISTOR>				R29	1-216-013-00	METAL GLAZE 33	5% 1/10W
R30				R30	1-218-325-11	METAL GLAZE 120	5% 1/4W
Q3	8-729-900-53	TRANSISTOR DTC114EK		R31	1-218-325-11	METAL GLAZE 120	5% 1/4W
Q01	8-729-107-26	TRANSISTOR 2SD1585-K		R32	1-218-325-11	METAL GLAZE 120	5% 1/4W
Q02	8-729-807-50	TRANSISTOR 2SD1623-R		R33	1-216-023-00	METAL GLAZE 82	5% 1/10W
Q04	8-729-271-22	TRANSISTOR 2SC2712-G		R34	1-216-049-00	METAL GLAZE 1K	5% 1/10W
Q05	8-729-807-50	TRANSISTOR 2SD1623-R		R37	1-216-025-00	METAL GLAZE 100	5% 1/10W
Q06	8-729-271-22	TRANSISTOR 2SC2712-G		R38	1-216-047-00	METAL GLAZE 820	5% 1/10W
Q07	8-729-900-98	TRANSISTOR DTC143TK		R40	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
Q09	8-729-807-87	TRANSISTOR 2SB1295-UL6		R41	1-216-041-00	METAL GLAZE 470	5% 1/10W
Q10	8-729-807-87	TRANSISTOR 2SB1295-UL6		R43	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
Q11	8-729-807-87	TRANSISTOR 2SB1295-UL6		R44	1-216-041-00	METAL GLAZE 470	5% 1/10W
<RESISTOR>				R45	1-216-049-00	METAL GLAZE 1K	5% 1/10W
JW1	1-216-295-00	METAL GLAZE 0 5% 1/10W		R46	1-216-311-00	METAL GLAZE 6.8	5% 1/10W
JW2	1-216-295-00	METAL GLAZE 0 5% 1/10W		R51	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
JW3	1-216-295-00	METAL GLAZE 0 5% 1/10W		R52	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
JW4	1-216-295-00	METAL GLAZE 0 5% 1/10W		R53	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
JW5	1-216-295-00	METAL GLAZE 0 5% 1/10W		R54	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
JW6	1-216-295-00	METAL GLAZE 0 5% 1/10W		R55	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
JW7	1-216-295-00	METAL GLAZE 0 5% 1/10W		R56	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
JW8	1-216-295-00	METAL GLAZE 0 5% 1/10W		R57	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
JW9	1-216-295-00	METAL GLAZE 0 5% 1/10W		R58	1-216-061-00	METAL GLAZE 3.3K	5% 1/10W
JW10	1-216-295-00	METAL GLAZE 0 5% 1/10W		R59	1-216-069-00	METAL GLAZE 6.8K	5% 1/10W
JW11	1-216-295-00	METAL GLAZE 0 5% 1/10W		R60	1-216-076-00	METAL GLAZE 13K	5% 1/10W
JW12	1-216-295-00	METAL GLAZE 0 5% 1/10W		R61	1-216-083-00	METAL GLAZE 27K	5% 1/10W
JW13	1-216-295-00	METAL GLAZE 0 5% 1/10W		R62	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
JW14	1-216-295-00	METAL GLAZE 0 5% 1/10W		R63	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
JW15	1-216-295-00	METAL GLAZE 0 5% 1/10W		R64	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
JW16	1-216-295-00	METAL GLAZE 0 5% 1/10W		R65	1-216-065-00	METAL GLAZE 4.7K	5% 1/10W
JW17	1-216-295-00	METAL GLAZE 0 5% 1/10W		R66	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
JW18	1-216-295-00	METAL GLAZE 0 5% 1/10W		R67	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
JW19	1-216-295-00	METAL GLAZE 0 5% 1/10W		R68	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
JW20	1-216-295-00	METAL GLAZE 0 5% 1/10W		R69	1-216-057-00	METAL GLAZE 2.2K	5% 1/10W
<VARIABLE RESISTOR>							
JW21	1-216-295-00	METAL GLAZE 0 5% 1/10W		RV01	1-238-012-11	RES, ADJ, CARBON 1K	
<CRYSTAL>							
JW21	1-216-295-00	METAL GLAZE 0 5% 1/10W		X01	1-567-162-00	OSCILLATOR, CRYSTAL	

V **B**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	
X02	1-567-495-11	OSCILLATOR, CRYSTAL						
X03	1-577-082-11	VIBRATOR, CERAMIC						

	*A-1621-007-A	B BOARD, COMPLETE	*****					

<CAPACITOR>								
C301	1-106-220-00	MYLAR	0.1MF	10%	100V	<DIODE>		
C302	1-124-120-11	ELECT	220MF	20%	16V	D301	8-719-911-19	DIODE 1SS119
C303	1-101-005-00	CERAMIC	0.022MF		50V	D303	8-719-911-19	DIODE 1SS119
C304	1-106-367-00	MYLAR	0.01MF	10%	400V	D304	8-719-911-19	DIODE 1SS119
C305	1-101-884-00	CERAMIC	56PF	5%	50V	D305	8-719-911-19	DIODE 1SS119
C306	1-101-006-00	CERAMIC	0.047MF		50V	D306	8-719-911-19	DIODE 1SS119
C307	1-101-004-00	CERAMIC	0.01MF		50V	D307	8-719-911-19	DIODE 1SS119
C308	1-101-888-00	CERAMIC	68PF	5%	50V	D308	8-719-911-19	DIODE 1SS119
C309	1-102-816-00	CERAMIC	120PF	5%	50V	D310	8-719-911-19	DIODE 1SS119
C310	1-102-978-00	CERAMIC	220PF	5%	50V	D311	8-719-911-19	DIODE 1SS119
C311	1-102-953-00	CERAMIC	18PF	5%	50V	D312	8-719-911-19	DIODE 1SS119
C312	1-102-953-00	CERAMIC	18PF	5%	50V	D313	8-719-911-19	DIODE 1SS119
C313	1-102-816-00	CERAMIC	120PF	5%	50V	D314	8-719-911-19	DIODE 1SS119
C314	1-102-978-00	CERAMIC	220PF	5%	50V	D315	8-719-911-19	DIODE 1SS119
C315	1-102-944-00	CERAMIC	7PF	0.5PF	50V	D316	8-719-911-19	DIODE 1SS119
C316	1-102-944-00	CERAMIC	7PF	0.5PF	50V	D317	8-719-911-19	DIODE 1SS119
C317	1-102-816-00	CERAMIC	120PF	5%	50V	D318	8-719-911-19	DIODE 1SS119
C318	1-102-074-00	CERAMIC	0.001MF	10%	50V	D319	8-719-911-19	DIODE 1SS119
C319	1-106-375-12	MYLAR	0.022MF	10%	250V			
C320	1-102-935-00	CERAMIC	2PF	0.25PF	50V			
C321	1-130-785-11	MYLAR	0.47MF	10%	100V	<DELAY LINE>		
C322	1-106-383-00	MYLAR	0.047MF	10%	100V	DL301	1-415-122-31	DELAY LINE
C323	1-124-791-11	ELECT	1MF	20%	50V			
C324	1-102-074-00	CERAMIC	0.0001MF	10%	50V			
C325	1-101-004-00	CERAMIC	0.01MF		50V			
C326	1-101-361-00	CERAMIC	150PF	5%	50V	<IC>		
C327	1-101-004-00	CERAMIC	0.01MF		50V	IC301	8-759-947-20	IC TDA4555-V8
C328	1-124-120-11	ELECT	220MF	20%	16V	IC302	8-759-947-19	IC TDA3505-V9
C329	1-131-367-00	TANTALUM	22MF	10%	16V			
C330	1-102-973-00	CERAMIC	100PF	5%	50V			
C331	1-124-927-11	ELECT	4.7MF	20%	50V	<COIL>		
C332	1-130-783-00	MYLAR	0.33MF	10%	100V	L301	1-408-423-00	INDUCTOR 150UH
C333	1-124-791-11	ELECT	1MF	20%	50V	L302	1-408-409-00	INDUCTOR 100UH
C334	1-106-375-12	MYLAR	0.022MF	10%	250V	L303	1-404-539-11	COIL
C335	1-106-375-12	MYLAR	0.022MF	10%	250V	L304	1-404-554-11	COIL
C336	1-124-927-11	ELECT	4.7MF	20%	50V	L305	1-404-554-11	COIL
C337	1-130-834-00	MYLAR	1MF	10%	63V	L306	1-404-554-11	COIL
C339	1-106-375-12	MYLAR	0.022MF	10%	250V	L307	1-408-423-00	INDUCTOR 150UH
C340	1-130-783-00	MYLAR	0.33MF	10%	100V	L308	1-404-495-00	COIL
C341	1-130-783-00	MYLAR	0.33MF	10%	100V			
C342	1-124-120-11	ELECT	220MF	20%	16V	<TRANSISTOR>		
C343	1-106-375-12	MYLAR	0.022MF	10%	250V	Q301	8-729-119-78	TRANSISTOR 2SC2785-HFE
C344	1-106-375-12	MYLAR	0.022MF	10%	250V	Q302	8-729-119-78	TRANSISTOR 2SC2785-HFE
C345	1-106-375-12	MYLAR	0.022MF	10%	250V	Q303	8-729-119-78	TRANSISTOR 2SC2785-HFE
C346	1-101-880-00	CERAMIC	47PF	5%	50V	Q304	8-729-119-78	TRANSISTOR 2SC2785-HFE
C347	1-106-375-12	MYLAR	0.022MF	10%	250V	Q305	8-729-119-78	TRANSISTOR 2SC2785-HFE
C348	1-106-375-12	MYLAR	0.022MF	10%	250V			
C349	1-106-375-12	MYLAR	0.022MF	10%	250V	Q307	8-729-119-78	TRANSISTOR 2SC2785-HFE
C350	1-124-917-11	ELECT	33MF	20%	50V	Q308	8-729-900-80	TRANSISTOR DTC114ES
C351	1-101-888-00	CERAMIC	68PF	5%	50V	Q309	8-729-173-38	TRANSISTOR 2SA733-K
C352	1-124-120-11	ELECT	220MF	20%	16V	<RESISTOR>		
C354	1-106-216-00	MYLAR	0.068MF	10%	100V	R301	1-249-418-11	CARBON 1.2K 5% 1/4W
	<CONNECTOR>					R302	1-249-401-11	CARBON 47 5% 1/4W

B**D**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R303	1-249-412-11	CARBON	390 5% 1/4W				<CRYSTAL>
R304	1-249-408-11	CARBON	180 5% 1/4W				
R305	1-249-416-11	CARBON	820 5% 1/4W				
R306	1-249-419-11	CARBON	1.5K 5% 1/4W				
R307	1-249-431-11	CARBON	15K 5% 1/4W				
R308	1-249-417-11	CARBON	1K 5% 1/4W				<MODULE>
R309	1-249-409-11	CARBON	220 5% 1/4W				
R310	1-247-891-00	CARBON	330K 5% 1/4W				
R311	1-247-891-00	CARBON	330K 5% 1/4W				
R312	1-249-405-11	CARBON	100 5% 1/4W				
R313	1-249-405-11	CARBON	100 5% 1/4W				
R314	1-249-405-11	CARBON	100 5% 1/4W				
R315	1-249-437-11	CARBON	47K 5% 1/4W				
R316	1-249-404-00	CARBON	82 5% 1/4W				
R317	1-249-429-11	CARBON	10K 5% 1/4W				
R318	1-247-848-11	CARBON	5.1K 5% 1/4W				
R319	1-249-419-11	CARBON	1.5K 5% 1/4W				
R320	1-249-437-11	CARBON	47K 5% 1/4W				
R321	1-249-418-11	CARBON	1.2K 5% 1/4W				
R322	1-249-417-11	CARBON	1K 5% 1/4W				
R323	1-249-410-11	CARBON	270 5% 1/4W				<CAPACITOR>
R324	1-249-421-11	CARBON	2.2K 5% 1/4W				
R325	1-249-419-11	CARBON	1.5K 5% 1/4W				
R326	1-249-417-11	CARBON	1K 5% 1/4W				
R327	1-249-415-11	CARBON	680 5% 1/4W				
R328	1-249-437-11	CARBON	47K 5% 1/4W				
R329	1-247-891-00	CARBON	330K 5% 1/4W				
R330	1-249-440-11	CARBON	82K 5% 1/4W				
R331	1-247-895-00	CARBON	470K 5% 1/4W				
R332	1-247-903-00	CARBON	1M 5% 1/4W				
R333	1-214-907-00	METAL	56K 1% W				
R334	1-249-426-11	CARBON	5.6K 5% 1/4W				
R335	1-249-439-11	CARBON	68K 5% 1/4W				
R336	1-249-425-11	CARBON	4.7K 5% 1/4W				
R337	1-249-413-11	CARBON	470 5% 1/4W				
R338	1-249-413-11	CARBON	470 5% 1/4W				
R341	1-249-431-11	CARBON	15K 5% 1/4W				
R343	1-247-885-00	CARBON	180K 5% 1/4W				
R344	1-249-432-11	CARBON	18K 5% 1/4W				
R345	1-249-433-11	CARBON	22K 5% 1/4W				
R346	1-249-413-11	CARBON	470 5% 1/4W				
R347	1-249-417-11	CARBON	1K 5% 1/4W				
R348	1-249-435-11	CARBON	33K 5% 1/4W				
R349	1-249-436-11	CARBON	39K 5% 1/4W				
R350	1-249-436-11	CARBON	39K 5% 1/4W				
R352	1-249-437-11	CARBON	47K 5% 1/4W				
R353	1-249-413-11	CARBON	470 5% 1/4W				
R355	1-247-887-00	CARBON	220K 5% 1/4W				
R356	1-247-887-00	CARBON	220K 5% 1/4W				
R357	1-249-417-11	CARBON	1K 5% 1/4W				
R359	1-249-417-11	CARBON	1K 5% 1/4W				
R360	1-249-429-11	CARBON	10K 5% 1/4W				
R399	1-247-903-00	CARBON	1M 5% 1/4W				
<VARIABLE RESISTOR>							
RV301	1-238-009-11	RES, ADJ, CARBON	220				
RV302	1-238-016-11	RES, ADJ, CARBON	10K				
<TRANSFORMER>							
T301	1-404-584-11	COIL					
				C201	1-124-479-11	ELECT	330MF 20% 25V
				C202	1-106-220-00	MYLAR	0.1MF 10% 100V
				C203	1-124-791-11	ELECT	1MF 20% 50V
				C204	1-106-383-00	MYLAR	0.047MF 10% 100V
				C205	1-123-875-11	ELECT	10MF 20% 50V
				C206	1-106-379-12	MYLAR	0.033MF 10% 250V
				C207	1-106-220-00	MYLAR	0.1MF 10% 100V
				C208	1-126-104-11	ELECT	470MF 20% 25V
				C209	1-102-074-00	CERAMIC	0.001MF 10% 50V

D

The components identified by shading and mark **▲** are critical for safety.

Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK							
C210	1-102-114-00	CERAMIC	470PF	10%	50V	C623▲.1-162-578-51	CERAMIC	0.0047MF	20%	400V				
C212	1-102-973-00	CERAMIC	100PF	5%	50V	C626▲.1-102-316-91	CERAMIC	15PF	5%	500V				
C213	1-101-005-00	CERAMIC	0.022MF		50V	C629▲.1-102-316-91	CERAMIC	15PF	5%	500V				
C402	1-101-003-00	CERAMIC	0.0047MF		50V	C631	1-102-244-00	CERAMIC	220PF	10%	500V			
C404	1-102-114-00	CERAMIC	470PF	10%	50V	C632	1-161-753-00	CERAMIC	470PF	10%	3KV			
C405	1-124-902-00	ELECT	0.47MF	20%	50V	C801	1-124-791-11	ELECT	1MF	20%	50V			
C406	1-124-477-11	ELECT	47MF	20%	16V	C803	1-106-359-00	MYLAR	0.0047MF	10%	400V			
C407	1-124-902-00	ELECT	0.47MF	20%	50V	C804	1-102-244-00	CERAMIC	220PF	10%	500V			
C409	1-124-477-11	ELECT	47MF	20%	16V	C806▲.1-162-131-11	CERAMIC	220PF	10%	2KV				
C410	1-124-477-11	ELECT	47MF	20%	16V	C807	1-136-933-11	FILM	1MF	5%	100V			
C411	1-102-074-00	CERAMIC	0.001MF	10%	50V	C808	1-136-187-11	FILM	0.047MF	10%	250V			
C412	1-126-101-11	ELECT	100MF	20%	16V	C812▲.1-136-080-11	FILM	0.001MF	5%	2KV				
C413	1-126-233-11	ELECT	22MF	20%	50V	C815	1-124-634-11	ELECT	1MF	20%	250V			
C415	1-126-233-11	ELECT	22MF	20%	50V	C819	1-102-114-00	CERAMIC	470PF	10%	50V			
C417	1-101-005-00	CERAMIC	0.022MF		50V	C821	1-106-220-00	MYLAR	0.1MF	10%	100V			
C418	1-102-074-00	CERAMIC	0.001MF	10%	50V	C822	1-136-540-11	FILM	0.82MF	5%	160V			
C423	1-102-114-00	CERAMIC	470PF	10%	50V	C825	1-102-212-00	CERAMIC	820PF	10%	500V			
C433	1-102-125-00	CERAMIC	0.0047MF	10%	50V	C851	1-123-948-00	ELECT	22MF	20%	250V			
C501	1-101-004-00	CERAMIC	0.01MF		50V	C852	1-162-114-00	CERAMIC	0.0047MF		2KV			
C502	1-102-117-00	CERAMIC	820PF	10%	50V	C853	1-162-318-11	CERAMIC	0.001MF	10%	500V			
C503	1-101-880-00	CERAMIC	47PF	5%	50V	C856	1-162-318-11	CERAMIC	0.001MF	10%	500V			
C504	1-124-480-11	ELECT	470MF	20%	25V	C857	1-106-375-12	MYLAR	0.022MF	10%	250V			
C505	1-124-122-11	ELECT	100MF	20%	50V	C858	1-126-233-11	ELECT	22MF	20%	50V			
C506	1-130-902-00	MYLAR	0.68MF	10%	63V	C859	1-126-101-11	ELECT	100MF	20%	16V			
C507	1-124-913-11	ELECT	470MF	20%	50V	C860	1-102-228-00	CERAMIC	470PF	10%	500V			
C508	1-106-220-00	MYLAR	0.1MF	10%	100V	<FILTER>								
C510	1-126-233-11	ELECT	22MF	20%	50V	<CONNECTOR>								
C551	1-124-927-11	ELECT	4.7MF	20%	50V	CND21	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)						
C552	1-124-927-11	ELECT	4.7MF	20%	50V	CND42	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR						
C553	1-106-220-00	MYLAR	0.1MF	10%	100V	CND43	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR						
C554	1-126-233-11	ELECT	22MF	20%	50V	CND44	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR						
C555	1-124-925-11	ELECT	2.2MF	20%	50V	(KV-M2131D ONLY)								
C556	1-101-361-00	CERAMIC	150PF	5%	50V	CND45	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR						
C557	1-130-783-00	MYLAR	0.33MF	10%	100V	CND61	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P						
C558	1-130-783-00	MYLAR	0.33MF	10%	100V	CND62	*1-565-458-11	PIN, CONNECTOR 3P						
C559	1-106-357-00	MYLAR	0.0039MF	10%	400V	CND81	*1-568-536-11	PLUG (MINIATURE DY) 6P						
C560	1-126-101-11	ELECT	100MF	20%	16V	CND82	*1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P						
C561	1-106-220-00	MYLAR	0.1MF	10%	100V	CND83	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P						
C562	1-164-143-11	CERAMIC	0.001MF	10%	1KV	CND84	*1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P						
C563	1-124-477-11	ELECT	47MF	20%	16V	CND85	*1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)						
C564	1-136-298-00	FILM	0.0033MF	2%	100V	(KV-M2131D ONLY)								
C565	1-106-228-00	MYLAR	0.22MF	10%	100V	<DIODE>								
C566	1-102-951-00	CERAMIC	15PF	5%	50V	D002	8-719-911-19	DIODE ISS119						
C567	1-106-371-00	MYLAR	0.015MF	10%	400V	D003	8-719-911-19	DIODE ISS119						
C568	1-164-143-11	CERAMIC	0.001MF	10%	1KV	D004	8-719-911-19	DIODE ISS119						
C570	1-124-902-00	ELECT	0.47MF	20%	50V	D005	8-719-312-99	DIODE SEL1210R-CD (KV-M2130D ONLY)						
C571	1-126-101-11	ELECT	100MF	20%	16V	8-719-970-79	DIODE PLED-H544CL-6 (KV-M2131D ONLY)							
C601▲.1-161-964-61	CERAMIC	0.0047MF		250V	*4-389-319-01									
C602▲.1-161-964-61	CERAMIC	0.0047MF		250V	D007	8-719-911-19	DIODE ISS119							
C603	1-161-964-61	CERAMIC	0.0047MF		250V	D008	8-719-911-19	DIODE ISS119						
C604	1-125-318-00	ELECT (BLOCK)	220MF	20%	400V	D009	8-719-911-19	DIODE ISS119						
C605	1-161-754-00	CERAMIC	0.001MF	10%	2KV	D010	8-719-911-19	DIODE ISS119						
C606	1-136-637-11	FILM	0.047MF	10%	630V	D011	8-719-911-19	DIODE ISS119						
C607	1-106-383-00	MYLAR	0.047MF	10%	100V	D016	8-719-911-19	DIODE ISS119						
C608	1-162-116-00	CERAMIC	680PF	10%	2KV	D017	8-719-911-19	DIODE ISS119						
C609	1-124-347-00	ELECT	100MF	20%	160V	D019	8-719-911-19	DIODE ISS119						
C610	1-124-557-11	ELECT	1000MF	20%	25V	D025	8-719-109-71	DIODE RD3.9ES-B1						
C614	1-126-101-11	ELECT	100MF	20%	16V									
C615▲.1-162-578-51	CERAMIC	0.0047MF	20%	400V										
C616▲.1-162-578-51	CERAMIC	0.0047MF	20%	400V										
C618	1-126-233-11	ELECT	22MF	20%	50V									
C620▲.1-136-519-11	FILM	0.47MF	20%	300V										
C621▲.1-136-519-11	FILM	0.47MF	20%	300V										
C622▲.1-162-578-51	CERAMIC	0.0047MF	20%	400V										

The components identified by shading and mark  are critical for safety.
Replace only with part number specified.

D

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R002	1-249-440-11	CARBON	82K 5% 1/4W	R157	1-249-421-11	CARBON	2.2K 5% 1/4W
R004	1-249-439-11	CARBON	68K 5% 1/4W	R158	1-249-421-11	CARBON	2.2K 5% 1/4W
R005	1-249-413-11	CARBON	470 5% 1/4W	R172	1-249-422-11	CARBON	2.7K 5% 1/4W
R006	1-249-441-11	CARBON	100K 5% 1/4W	R173	1-249-429-11	CARBON	10K 5% 1/4W
R008	1-249-429-11	CARBON	10K 5% 1/4W	R180	1-249-419-11	CARBON	1.5K 5% 1/4W
R009	1-249-429-11	CARBON	10K 5% 1/4W	R185	1-249-439-11	CARBON	68K 5% 1/4W
R010	1-249-433-11	CARBON	22K 5% 1/4W	R186	1-249-441-11	CARBON	100K 5% 1/4W
R011	1-249-433-11	CARBON	22K 5% 1/4W	R201	1-249-387-11	CARBON	3.3 5% 1/4W
R012	1-249-433-11	CARBON	22K 5% 1/4W	R202	1-247-887-00	CARBON	220K 5% 1/4W
R013	1-249-433-11	CARBON	22K 5% 1/4W	R203	1-249-411-11	CARBON	330 5% 1/4W
R014	1-215-900-11	METAL OXIDE	22K 5% 2W	R204	1-247-739-11	CARBON	100 5% 1/2W
R015	1-249-421-11	CARBON	2.2K 5% 1/4W	R401	1-247-804-11	CARBON	75 5% 1/4W
R016	1-249-433-11	CARBON	22K 5% 1/4W	R402	1-247-804-11	CARBON	75 5% 1/4W
R017	1-249-407-11	CARBON	150 5% 1/4W	R403	1-247-804-11	CARBON	75 5% 1/4W
R018	1-249-417-11	CARBON	1K 5% 1/4W	R404	1-247-804-11	CARBON	75 5% 1/4W
R019	1-249-413-11	CARBON	470 5% 1/4W	R405	1-249-411-11	CARBON	330 5% 1/4W
R020	1-249-413-11	CARBON	470 5% 1/4W	R406	1-249-411-11	CARBON	330 5% 1/4W
R021	1-249-413-11	CARBON	470 5% 1/4W	R407	1-249-411-11	CARBON	330 5% 1/4W
R022	1-249-411-11	CARBON	330 5% 1/4W	R408	1-249-431-11	CARBON	15K 5% 1/4W
R023	1-249-416-11	CARBON	820 5% 1/4W	R409	1-249-431-11	CARBON	15K 5% 1/4W
R025	1-249-417-11	CARBON	1K 5% 1/4W	R410	1-249-409-11	CARBON	220 5% 1/4W
R029	1-249-429-11	CARBON	10K 5% 1/4W	R411	1-249-409-11	CARBON	220 5% 1/4W
R030	1-249-429-11	CARBON	10K 5% 1/4W	R412	1-249-409-11	CARBON	220 5% 1/4W
R035	1-249-431-11	CARBON	15K 5% 1/4W	R413	1-249-425-11	CARBON	4.7K 5% 1/4W
R037	1-249-429-11	CARBON	10K 5% 1/4W	R414	1-249-433-11	CARBON	22K 5% 1/4W
R038	1-249-429-11	CARBON	10K 5% 1/4W	R415	1-215-858-00	METAL OXIDE	15 5% 1W (KV-M2131D ONLY)
R039	1-249-417-11	CARBON	1K 5% 1/4W	R416	1-247-804-11	CARBON	75 5% 1/4W
R040	1-249-430-11	CARBON	12K 5% 1/4W	R418	1-249-417-11	CARBON	1K 5% 1/4W
R042	1-249-433-11	CARBON	22K 5% 1/4W	R419	1-249-425-11	CARBON	4.7K 5% 1/4W
R043	1-249-429-11	CARBON	10K 5% 1/4W	R420	1-249-413-11	CARBON	470 5% 1/4W
R044	1-249-433-11	CARBON	22K 5% 1/4W	R421	1-249-409-11	CARBON	220 5% 1/4W
R046	1-249-425-11	CARBON	4.7K 5% 1/4W	R422	1-249-404-00	CARBON	82 5% 1/4W
R051	1-249-427-11	CARBON	6.8K 5% 1/4W	R423	1-249-438-11	CARBON	56K 5% 1/4W
R052	1-249-413-11	CARBON	470 5% 1/4W	R424	1-249-437-11	CARBON	47K 5% 1/4W (KV-M2130D ONLY)
R055	1-249-413-11	CARBON	470 5% 1/4W	R425	1-249-437-11	CARBON	47K 5% 1/4W
R056	1-249-423-11	CARBON	3.3K 5% 1/4W	R426	1-249-405-11	CARBON	100 5% 1/4W (KV-M2130D ONLY)
R058	1-249-429-11	CARBON	10K 5% 1/4W	R427	1-247-804-11	CARBON	75 5% 1/4W
R059	1-249-426-11	CARBON	5.6K 5% 1/4W	R428	1-249-432-11	CARBON	18K 5% 1/4W
R060	1-249-417-11	CARBON	1K 5% 1/4W	R429	1-249-409-11	CARBON	220 5% 1/4W (KV-M2130D ONLY)
R061	1-249-413-11	CARBON	470 5% 1/4W	R430	1-249-437-11	CARBON	47K 5% 1/4W (KV-M2130D ONLY)
R063	1-249-422-11	CARBON	2.7K 5% 1/4W	R431	1-249-441-11	CARBON	100K 5% 1/4W
R064	1-249-417-11	CARBON	1K 5% 1/4W	R432	1-249-437-11	CARBON	47K 5% 1/4W (KV-M2130D ONLY)
R065	1-249-433-11	CARBON	22K 5% 1/4W	R434	1-249-415-11	CARBON	680 5% 1/4W
R066	1-249-425-11	CARBON	4.7K 5% 1/4W	R435	1-249-440-11	CARBON	82K 5% 1/4W
R070	1-249-429-11	CARBON	10K 5% 1/4W	R436	1-249-409-11	CARBON	220 5% 1/4W
R071	1-249-413-11	CARBON	470 5% 1/4W	R437	1-249-429-11	CARBON	10K 5% 1/4W
R072	1-249-441-11	CARBON	100K 5% 1/4W	R441	1-216-375-00	METAL OXIDE	3.3 5% 2W F (KV-M2131D ONLY)
R073	1-249-435-11	CARBON	33K 5% 1/4W	R444	1-249-411-11	CARBON	330 5% 1/4W
R074	1-249-429-11	CARBON	10K 5% 1/4W	R445	1-216-452-11	METAL OXIDE	180 5% 2W F (KV-M2130D ONLY)
R075	1-249-431-11	CARBON	15K 5% 1/4W	R501	1-249-425-11	CARBON	4.7K 5% 1/4W
R076	1-249-423-11	CARBON	3.3K 5% 1/4W	R502	1-247-744-11	CARBON	270 5% 1/2W
R077	1-249-435-11	CARBON	33K 5% 1/4W	R503	1-215-867-00	METAL OXIDE	470 5% 1W
R078	1-249-427-11	CARBON	6.8K 5% 1/4W				
R079	1-249-429-11	CARBON	10K 5% 1/4W				
R080	1-249-429-11	CARBON	10K 5% 1/4W				
R084	1-249-424-11	CARBON	3.9K 5% 1/4W				
R085	1-247-881-00	CARBON	120K 5% 1/4W				
R086	1-249-429-11	CARBON	10K 5% 1/4W				
R151	1-249-405-11	CARBON	100 5% 1/4W				
R152	1-249-429-11	CARBON	10K 5% 1/4W				
R153	1-249-433-11	CARBON	22K 5% 1/4W				
R154	1-249-429-11	CARBON	10K 5% 1/4W				
R155	1-249-418-11	CARBON	1.2K 5% 1/4W				
R156	1-247-891-00	CARBON	330K 5% 1/4W				

The components identified by shading and mark  are critical for safety.
Replace only with part number specified.

D

ACCESSORIES AND PACKING MATERIALS

PART NO.	DESCRIPTION	REMARK
4-200-324-31	MANUAL, INSTRUCTION	
*4-380-340-01	BAG, PROTECTION	
*4-385-902-01	INDIVIDUAL CARTON	
*4-387-961-01	CUSHION (UPPER) (ASSY)	
*4-387-962-01	CUSHION (LOWER) (ASSY)	

REMOTE COMMANDER

1-465-487-11 REMOTE COMMANDER (RM-657)
4-384-285-01 COVER, BATTERY (FOR RM-657)